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THE NEW-YORK

JOURNAL OF MEDICINE,

AND THE

COLLATERAL SCIENCES.

Verumque est, ad ipsam curandi rationem nihil plus conferre, quam experientiam. CELSUS.

VOL. II.—NEW SERIES.

NEW-YORK:
HENRY G. LANGLEY, 3 ASTOR-HOUSE, BARCLAY-ST.
1849.

WM. OSBORN, PRINTER, COR. SPRUCE & NASSAU-STS.

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TO READERS AND CORRESPONDENTS.

The delay of the present issue has been owing entirely to the late serious illness of the Editor. A contingency which, should it again occur, will be timely provided for.

Our next number will contain articles from Prof. J. B. Beck, M. D., Israel Moses, M. D., U. S. A., Prof. Pigné, Drs. W. H. Van Buren and Bennet, and a continuation of the Report of the Proceedings of the New-York Pathological Society.

We acknowledge the reception of the following books:

A Treatise on Etherization in Childbirth. Illustrated by five hundred and eighty-one Cases. By Walter Channing, M. D., Professor of Midwifery and Medical Jurisprudence in the University of Cambridge. Boston: William D. Ticknor and Company, 1848; 8vo. pp. 400. (From the Author.)

The Transactions of the American Medical Association. Instituted 1847. Vol. I. Philadelphia: Printed for the Association, by J. K. & P. G. Collins, 1848; 8vo. pp. 403. (From the Association.)

Essays on Infant Therapeutics; to which are added, Observations on Ergot and an account of the Origin of the Use of Mercury in Inflammatory Complaints, by John B. Beck, M. D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons in the University of the State of New-York; Corresponding Member of the Royal Academy of Medicine of Paris; Corresponding Member of the Medical Society of London; one of the Vice Presidents of the Academy of Medicine of New-York, etc., etc. New-York: W. E. Dean, Printer and Publisher, 1849; 12mo. pp. 117. (From the Author.)

A Practical Treatise on the Diseases of Children, by James Stewart, M. D., A. M., Fellow of the College of Physicians and Surgeons; one of the Consulting Physicians of the Northern Dispensary of the City of New-York; late Physician to the Orphan Asylum, etc., etc. Third edition, carefully revised and enlarged. New-York: Harper & Brothers; 8vo. pp. 544. (From the Publishers.)

A Complete Practical Work on the Nature and Treatment of Venereal Diseases, and other affections of the Genito-Urinary Organs of the Male and Female. Illustrated by a great number of beautifully colored plates, and many finely executed delineations on wood. By Homer Bostwick, M. D., Author of "A Treatise on the Nature and Treatment of Seminal Diseases," etc., etc., etc. New-York: Burgess, Stringer & Co., 1848; 4to. pp. 348. (From the Author.)

A Text Book of Practical Anatomy, by Robert Harrison, M. D., M. R. I. A., Fellow of the Royal College of Surgeons of Ireland and England; Professor of Anatomy and Surgery, and one of the Surgeons of the Jervis street Dispensatory, etc., etc. With additions by an American Physician. With numerous illustrations. New-York: Samuel S. & William Wood, 1848; 8vo. pp. 720. (From the Publiishers.)

Medical Lexicon of Modern Terminology; being a complete vocabulary of definitions, including all the Technical Terms employed by Writers and Teachers of Medical Science at the present day, and comprising several hundred words not found in any Dictionary. Designed for the use of Students and Practitioners. Second edition, greatly enlarged. By D. Meredith Reese, M. D., LL. D. New-York: Samuel S. & William Wood, 1848; 16mo. pp. 233. (From the Publishers.)

Lectures on Venereal and other Diseases arising from Sexual Intercourse. Delivered in the Summer of 1847 at the Hôpital Du Midi, Paris. By M. Ricord. Reported and Translated by Victor de Meric, M. D., M. R. C. S. E. Philadelphia: Ed. Barrington and Geo. D. Haswell, 1849; 12mo. pp. 298. (From the Publishers.)

Summary of the Transactions of the College of Physicians of Philadelphia. From April 4th to August 1st, 1848; 8vo. pp. 51. (From the Society.)

Man and his Motives. By George Moore, M. D., Member of the Royal College of Physicians, London, etc.; Author of "The Use of the Body in relation to the Mind," etc., etc. New-York: Harper & Brothers, 1848; 12mo. pp. 301. (From the Publishers.)

A Discourse on the Influence of Disease on the Intellectual and Moral Powers. Delivered as an Introductory Lecture at the College of Physicians and Surgeons in the City of New-York, Oct. 30th, 1848. By Joseph Mather Smith, M. D., Professor of the Theory and Practice of Physic and Clinical Medicine. New-York: 1848; 8vo. pp. 35. (From the Author.)

Hygiene; An Introductory Lecture. By Samuel Henry Dickson, M. D., Professor of the Theory and Practice of Medicine in the University of the City of New-York. New-York: 1848; 8vo. pp. 24. (From the Author.)

An Introductory Lecture to the Medical Class of the University of Louisville. By Lunsfobd P. Yandell, M. D., Professor of Chemistry and Pharmacy. Louisville: Oct. 16th, 1848; 8vo. pp. 28. (From the Author.)

An Introductory Lecture on the Coinciding Tendencies of Medicines. By **Jared P. Kirtland**, M. D., Prof. of the Theory and Practice of Medicine, and Physical Diagnosis in the Medical Department of the Western Reserve College at Cleaveland, O. Cleaveland: 1848; 8vo. pp. 16. (From the Author.)

Report of the Standing Sanatory Committee of the Board of Health of the City of New-York, on the subject of Asiatic Cholera, at present prevailing at the Quarantine Establishment of New-York, Staten Island. New-York: 1848; 8vo. pp. 24. (From the Board of Health.)

"Facts for the People." The Use and Abuse of Air; Showing its Influence in Sustaining Life and Producing Disease. With Remarks on the Ventillation of Houses. In three parts. Parts I. and II. New-York: J. S. Redfield; 12mo. pp. 72. (From the Author.)

The following Journals have been received in Exchange:

The Medical Examiner and Record of Medical Science, edited by Robert M. Huston, M. D., for November and December. (Monthly. Philadelphia.)

The New-Orleans Medical and Surgical Journal, devoted to Medicine and the Collateral Sciences, edited by J. Harrison, M. D, and A. Hester, M. D., for November. (Bi-Monthly. New-Orleans.)

Southern Medical and Surgical Journal, edited by Paul F. Eve, M. D., for November and December. (Monthly. Augusta.)

The Charleston Medical Journal and Review, edited by P. C. Gaillard, M. D., and H. W. De Saussure, M. D., for November. (Bi-Monthly. Charleston.)

St. Louis Medical and Surgical Journal, edited by M. L. Linton, M. D., John S. More, M. D., Wm. M. McPheeters, M. D., and Joseph N. McDowell, M. D., for November. (Bi-Monthly. St. Louis)

The North-Western Medical and Surgical Journal, edited by W. B. Herrick, M. D., and J. Evans, M. D., November and December. (Bi-Monthly. Chicago and Indianapolis.)

The Western Journal of Medicine and Surgery, edited by D. Drake, M. D., L. P. Yandell, M. D., and F. W. Colescott, M. D. Not received since May last. Monthly. Louisville.)

The Western Lancet and Hospital Reporter, edited by L. Lawson, M. D., and John P. Harrison, M. D., for May, June, July, August, September, October, November and December. (Monthly. Cincinnati.)

The Ohio Medical and Surgical Journal. Edited by John Butterfield, M. D., for September. (Bi-Monthly. Columbus.)

Buffalo Medical Journal, and Monthly Review of Medical and Surgical Science, edited by Austin Flint, M. D., for November and December. (Monthly. Buffalo.)

The Boston Medical and Surgical Journal, edited by J. C. V. Smith, M. D. Numbers for November and December received. (Weekly. Boston.)

The Annalist, a Record of Practical Medicine in the City of New-York, edited by N. S. Davis, M. D., for November and December. (Semi-Monthly. New-York.)

The Medical News and Library, edited by ——, for September, October, November and December. (Monthly. Philadelphia.)

The New-York Dental Recorder, edited by C. C. Allen, M. D., Dentist, for November and December. (Monthly. New-York.)

The British-American Journal of Medicine and Physical Science, edited by Archibald Hall, M. D., L. R. C. S. E., for November and December. (Monthly. Montreal.)

Dublin Quarterly Journal of Medical Science, edited by ——. August and November. (Quarterly. Dublin, Ireland.)

Monthly Journal and Retrospect of Medical Science, edited by ——. Not received since May last. (Monthly. Edinburgh and London.)

London Medical Gazette, or Journal of Practical Medicine, edited by ——, for September. (Weekly. London.)

The British Record of Obstetric Medicine, Surgery and Diseases of Women and Children, &c. &c., edited by Charles Clay, M. D. (Not yet received.)

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All remittances of money and letters on the *business* of the Journal, should be addressed to the publisher, Henry G. Langley, New-York.

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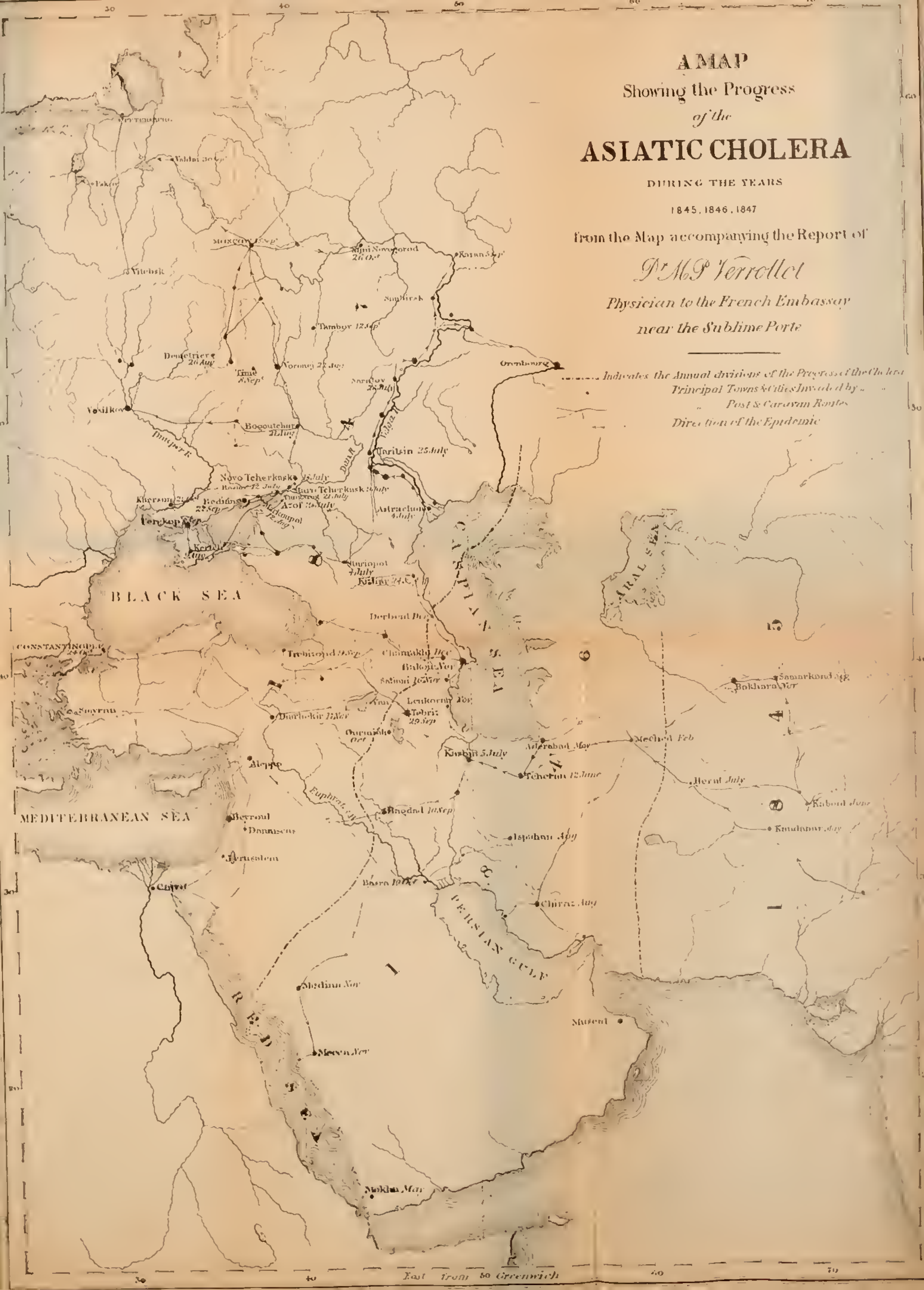

A MAP
Showing the Progress
of the
ASIATIC CHOLERA
DURING THE YEARS
1845, 1846, 1847
from the Map accompanying the Report of
Dr. M. P. Verrollet
Physician to the French Embassay
near the Sublime Porte

.... *Indicates the Annual divisions of the Progress of the Cholera*
Principal Towns & Cities Invaded by „ „
„ Post & Caravan Routes
Direction of the Epidemic

THE NEW-YORK

JOURNAL OF MEDICINE.

FOR JANUARY, 1849.

PART FIRST.

ORIGINAL COMMUNICATIONS.

Art. I.—*On the Progress of the Asiatic Cholera during the Years* 1844–45–46–47–48. *With Remarks by* S. H. Dickson, M. D., Professor of the Theory and Practice of Medicine in the University of New-York. (With a Map.)

We have received from a friend at Constantinople, an interesting series of papers, published in the Echo de l'Orient, by Dr. Verrollot, Physician to the French Embassy near the Sublime Porte, accompanied by a map, curious for its minute details, geographical and chronological. They contain the only history extant, so far as we know, of the march and progress of the epidemic cholera which now ravages Asia, has invaded Europe, and threatens for a second time to devastate the entire surface of the globe.

The Delta of the Ganges, it is well known, constitutes the original focus of this terrible pestilence. It has existed there without interval certainly for the last thirty years, within which period it has twice sent forth its pestiferous waves on every side, from that centre. From the end of the year 1837, we have heard little or nothing of it within the domains of civilization—it seemed to confine itself to its ancient domicile on the plains of Hindostan.

In 1844, it is known to have made an encroachment upon Afghanistan, where its ravages were considerable. In May, 1845, it was at Kandanar, carrying off 300 victims a-day; in June, at Kaboul; in July, at Herat. "It is said that some pilgrims, returning home, contracted the disease in the last named city, and introduced it into Samarkhand in September." From Samarkhand it passed, in November, to Bokhara, where it wintered, penetrating, in February, 1846, to Meched. From Meched it traversed Khorassan from east to west, following the great roads, reaching Asterabad in May, 1846, and Teheran in June, (1846,) carrying off 7000 persons in 70 days—one-twentieth of the population. It broke out in Bagdad early in September, 1846; its victims in three weeks amounting to 4,300 souls—nearly one-seventh of the population.

Towards the end of November, (1846,) it showed itself in Medina and Mecca. At Mecca its victims amounted to 15,000, in a transient population of 100,000. "Is it true," asks Dr. Verrollot, an impartial historian, but evidently unwilling to admit the contagiousness of this disease, "is it true, as has been supposed, that cholera was imported into Mecca by the caravan from Bagdad?" "It is curious that in 1846, as in 1831, cholera appeared in these places at the precise moment when the Hadgis flocked thither from all sides."

At the same time the pestilence spread in two other directions from Teheran, following the western coast of the Caspian sea, and penetrating into the ancient Media, the modern province of Adhubidjan. We trace it to Kasbin, Tebriz, Ourmiah. In November, 1846, it invaded the Russian provinces of Talieh and Chirwan. Just as in 1823, it passed on by Lenkoran, Saliani, and Bakou, reaching, on one hand, Chamakhi, at the southern extremity of Caucasus, and on the other, the defile of Derbend, at the 42d degree of latitude.

Here it stopped at the end of that year, (1846,) and took up, so to speak, its winter quarters upon the frontiers of Europe. During two months nothing was heard of it; there was, indeed, a moment of hope that it had disappeared entirely. But this illusion did not last. At the end of March, 1847, this modern hydra started from its short sleep, and raised, more terrible than ever, its thousand hungry heads. It reäppeared in the lower valleys of Daghestan and Chirwan, in the midst of the marshes which fringe on this shore the Caspian sea. This region, fruitful in intermittent fevers of grave character, seems equally propitious to the production of cholera-morbus. The fatal coincidence which exists in many places between the epidemic we are describing and intermittent fever, has been often remarked. The analogy of these maladies is even so striking that many physicians have gone so far as to consider them fundamentally identical, and determined by the same morbific principle. Be this as it may, it was here that cholera raged with its most cruel intensity, and from hence it resumed its westward march, a moment interrupted. Its course was twofold; on one side invading Georgia and Turkey, on the other penetrating the mountains, where it met the armies of Russia, and inflicted upon them a loss greater than that of three years' war. In May, 1847, it arrived at Kizliar, at the embouchure of the Terek, not only raging in the city, but attacking the stanitzas of Kossacks in its environs. In June and July, nine of these military villages were invaded, and many squadrons, seeing its approach, shunned it by abandoning their stations and retiring into the Steppe, where it did not follow them. From the delta formed by the numerous mouths of the Terek, the cholera radiated towards Astrachan on the north, to the northwest, in the Steppe of Kouma, where it reached four "Oulouss" of Kalmucks, who had not yet abandoned their summer encampment, and westwardly to Stariopol, chief town of the province of Caucasus. On the same day, July 4th, 1847, the epidemic broke out at each of these extreme points, traversing in 41 days the different distances of 35, 68, and 96 leagues.

As soon as it showed itself among the Kalmucks, they struck their tents and moved away. But it seemed that the new places to which they retired were equally favorable to the development of cholera, for they were not as fortunate as the Kossacks of whom we spoke above. The epidemic continued, and spread itself among other "Oulouss," without exhibiting, however, any great degree of rigor; for in 32 days no more than 181 individuals were seized, of whom 90 succumbed.

Dr. V. considers these Kalmucks as "the type of physical man, of man in good health," subjects therefore in whom cholera would show itself, "with all its proper characteristics," and concludes that in the most natural and favorable conditions, the law of average mortality would be for cholera, 50 per cent.

The quarantine establishment of Astrachan, is situated at 18 leagues distance from it to the south, on the small island Biroutchaia-Kossa. It appeared there on the 3d July, we know not how introduced; on the next day it passed to the city. Its three earliest victims, died in less than 24 hours. At first its progress was slow, but from the 13th July, 1847, it extended with great rapidity and malignity, the weather being very hot and the air exceedingly moist from the falling of the waters of the Volga. In less than three months the deaths reached 1413, in a population of about 50,000, being at a ratio of 57.55 per cent. of the sick.

Of the various classes inhabiting Astrachan, the Russians suffered most. The Mussulmans are more cleanly, dress more warmly even in summer, and live soberly and temperately.

From this point, the pestilence spread itself in every direction over the neighboring country, and along the banks of the Volga. But there was one remarkable exception, upon which Dr. V. dwells with a reasonable enthusiasm, and which deserves, indeed very special notice. There is a small Moravian colony, called Sarepta situated in a bend of the river, in the midst of the Kalmuck hordes, eulogized by all travellers for its remarkable industry and minute cleanliness, and all other laudable and fortunate features of character. The cholera itself seemed to respect this sacred spot; passing by, both in 1830 and in 1847, without inflicting upon it the least evil.*

In the government of Astrachan, cholera reigned 13 weeks. Official reports state the number of those attacked at 7,132, the deaths being 3,772, a fraction more than half. At Saratov, a town of 45,000 souls, it appeared on the 11th of August, lasted 32 days, carrying off 2,240 victims, the deaths being to the number attacked in the appalling proportion of 76 per cent., more than three fourths! One is surprised after this statement, to meet with the remark, that "the observations made by the physicians of Saratov, tend to prove that the present epidemic is less malignant than the former one." This remark is repeated in reference to the city of Kazan, where we find the cholera on the 5th of September, at the distance of 110 leagues in a straight line, this great distance having been traversed as it were "at a bound," in 19 days. Here, however, it seems to be better founded, the deaths being about the average proportion 49 per cent., amounting to 1208 out of 2467 sick, in a population of 58,000.

At the same time when it spread itself throughout the government of Kasan, we find the epidemic extending towards Orenbourg, eastwardly.

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* A writer quoted by Copland, (Dict. No. XI., p. 115,) ascribes the immunity of Sarepta to its rigid quarantine.

It penetrated into the government of Nijni Novogorod on the 8th of September. Here it prevailed with comparative mildness. On the other hand in the government of Voroneje, on the south and west, it offered a character of malignity much more pronounced. In the province of Caucasus, it is observed that the disease showed itself more intense in the valleys and in defiles inaccessible to the winds, where the heat is great and that it attacked the Russian troops and residents in preference to the Mussulmans. The mountaineers were less exposed. But generally, the epidemic had here a strongly malignant character, and affected the whole population in various degrees. The Tscherkess, on the left bank of the river Kouban, suffered particularly. It is not known whether the epidemic penetrated farther into the valleys of Caucasus.

At Taganrog on the sea of Azof, it appeared on the 21st July; in a population of about 16,000, it attacked, during 56 days of prevalence, 501 persons, of whom 215 died; a proportion of near 43 per cent. Hence it made a traverse of 23 leagues, in 22 days, to Manoupol, and from Manoupol to Bediansk, 13 leagues in 41 days. To Perekop, it made "a bound" of 65 leagues; from that point to Kherson, a town at the mouth of the Dneiper, it took 49 days to make 21 leagues. Southwardly in the Crimea, it moved much more rapidly, projecting its fatal rays in the space of a single month to a distance of nearly 200 leagues.

It seems that the cholera appeared about the middle of July, in the government of Voroneje, at Bytchkovskaia, near the Don, upon the Kossack frontier. This place is 73 leagues in a straight line, 77 by the post road, and 125 by the river, from Novo Tcherkask, the capital of the province of the Don, where the epidemic showed itself one day previous; if it arrived from thence, it must have cleared that great distance in a single day. But it is more probable that it was received direct from Staro Tcherkask, a stanitza of the Kossacks, the probable source whence it reached Rostov and Novo Tcherkask, equally distant, giving 10 days for its march thence. Seeing it thus clear "at a bound," this great interval, one would expect it to be developed rapidly in the environs of Bytchkovskaia. Precisely the contrary happened. It was not until a month after that it appeared at Bogoutchar, a town situated on the other side of the river, only four leagues distant, and it consumed 40 days more in reaching Pavlosk, the chief place of the neighboring district, 17 leagues away, traversed both by the river and the great road.

At Voroneje, it broke out on the 22d August. This is a city of 25,000 souls, situated on a branch of the Don and often ravaged by intermittent fevers; the climate is mild and the soil fertile. The winter coming on in December, lasts but four months. Here the cholera spread with uncommon rapidity, the proportion of those attacked to the whole population being very considerable. But the proportion of deaths among the sick was less than two-fifths, or about 40 per cent.

In the government of Kharkov the epidemic appeared on the 20th July, spreading rapidly to the northward and thus penetrating into the government of Koursk. On the 9th August it showed itself in several villages of the district of Obïane; on the 26th August at Demetriev, 22 leagues northwest; the 8th September at Timè, 15 leagues west; and on the 9th at Fatije, 13 leagues northwest; lastly, in the month of October, at Chtchigri, chief town of the district of that name.

Thus the cholera occupied six weeks in overrunning the fifteen districts of the government of Koursk, comprising a superfices of 2,185 square leagues and about two millions of inhabitants. It found here conditions more favorable than elsewhere to its existence, and continued to rage with obstinacy. On the 31st December it still reigned in seven districts. From the day of its entrance until that period it had attacked 16,554 individuals, of whom it had carried off 6,409—about two-fifths.

Here, we regret to say, terminates our file of papers containing the precise history of cholera, from the pen of Dr. Verrollot, and in tracing its farther march we must resort to other sources of information. Meanwhile let us review the statements for which we are indebted to him, and add to what has been said of its origin and progress such facts as have been recorded tending to point out its causes and mode of propagation, and ascertain what has been done by our profession towards its prevention and cure.

First, let us observe that whatever may have been the original source of cholera in the central region, whence it has twice within the present century extended itself by a sort of radiation, its mode of extension has ever been *progressive.* It has been traced by the assiduous diligence of observers like Dr. Verrollot from point to point, seemingly incapable of finding a resting place. What centrifugal force thus discharges or projects it on every side? The impression is universal, and is conveyed in universal language. "The cholera," says every one, "is coming!" What is it that comes—the disease, or its cause? The disease alone, or a case of it, or a hundred cases, would excite no alarm in coming, if it were not for the universal belief that with the disease, with a case or cases of cholera, comes also the efficient cause of other cases, the cause of its epidemic prevalence. It would seem then to be universally agreed on that the cause is not local or indigenous; "it comes," it acts, it goes away, or subsides or becomes inert. How does it come? What is its mode of progress? Is it wafted by winds? Is it *stayed by any obstacles?*

When existing at any one point, has it ever showed itself at any remote point by a clearly proved spontaneity? It will hardly be asserted that it has ever, out of Hindostan, originated in any locality unless that place was connected by social or other intercourse with some other at which it was previously known to exist, and the uniform coincidence of such intercourse being established, we next inquire whether such intercourse is necessary to its spread, and whether it be the means of its extension. Those have to sustain, in view of this constant coincidence, a heavy burden of proof who set out to show, that nevertheless it is not transportable nor ever transported; not communicable, nor ever communicated; not contagious, nor ever conveyed by infection; that it is always of local origin, indigenous, and of spontaneous production wherever it appears; that all soils, all climates, all temperatures, all states of society, all localities, are capable of giving rise to it.

Whatever may be the cause of cholera, whether a vegetable fungus, a nucleated cell, an insect or animalcule, or an emanation aerial, gaseous or chemical, there must be a *materies morbi.* It travels, doubtless; but by what modes? It is either originally inexhaustible in amount and force, a notion hardly tenable when we look over the immense extent of its prevalence, or it is reinforced by additions to its mass from time to time and in various places. How is it thus reinforced? Whence does it derive these additions? Soil, climate, subjects, locality, are all changed, but nevertheless *the same agent* is generated and regenerated; the *same*, for the effects of its causative action are every where identical; precisely the same amidst the snows of Russia as "under the burning line." We believe that this train of thought leads philosophically and by logical necessity, to the doctrine of infection—of contagious propagation. The same causes produce the same effects. From the choleric patient is derived the supply of that agent which affected him with the disease. *He* presents the only similar contingency, in his personal condition, which can be traced when we endeavor to connect effect with cause, and ask why cholera, which in January was in Moscow, is in September at Hamburg; which, thirty years ago ravaged Hindostan, and now threatens the crowded cities of England.

We are not very anxious to indicate the specific links of the chain of events which bind together the various and successive invasions of countries, districts, and cities. We care very little whether the particular individual can be pointed out to whom the fatal importation is owing. We listen coldly to the special pleading which ingeniously disproves any alleged mode of communication, and seeks to discover an insulated case or cases any where that cannot be brought in contact with any previous case. We attended, during the last winter, 40 cases of *smallpox*, not one of which could be connected either by contact or conscious near approach with any other: nay, Haygarth says, "it never can be traced as from a centre." We are satisfied with the overwhelming force of the general views above set forth, and regard the question of the communicability of cholera, as being quite as well settled as any other point in pathology.

The non-contagionist shrinks from any speculation of a definite character concerning the cause of this terrible pestilence. He indulges in vague declamation as to the terrible inquination of the air we breathe by the foul vapors of the marsh, and the dense emanations of the river shore, and the confined atmosphere of the lanes, alleys and courts, of crowded cities. But all this does not touch the true point in dispute. The marsh, the valley, the hovel, and the damp cellar, are familiar sources of evil on which all eyes are fixed. But the same source which in 1846 eliminated intermittent or typhus, yields in 1847 a *new product.* Whence the difference?

Dr. Verrollot quotes with approbation the views of those who regard cholera as one of the products of malaria, an analogue, so to speak, of the malignant and congestive fevers which belong to hot and moist climates. But however frequently and severely it may prevail in certain situations where these fevers arise, it never shows itself spontaneously in some of *their* best known seats; nay, even when its specific cause developed itself upon our American continent, many of the localities annually ravaged by the worst malarious fevers entirely escaped; while it extended over the healthier portions of the northern and middle states, and in cities, where, according to Bancroft and Johnson, density of population gives immunity from the diseases brought on by the paludal poison.

Dr. V. tells us that "the epidemic was more intense in the towns than in the country." He informs us that at Saratov "towards the end of the epidemic, certain other maladies, such as *intermittent fevers*, reäppeared, of which no vestiges could be perceived during the great intensity of the scourge. It was always observed however that typhoid fevers were not subject to its influence; they showed themselves frequently without any choleric symptom, while, on the other hand, the cholera often transformed itself into a typhoid fever, or complicated itself with that malady." These facts agree with observations made in our own country which go to show affinity on the part of cholera, rather with the typhoid affections of dense and wretched populations, than with the wide-spreading malaria of our southern and western country. Yet Dr. Verrollot, with his laudable exactness, soon separates it from typhoid diseases by showing that it is always, in direct contrast with them, somewhat repressed by the cold of winter, although unhappily not extinguished. Its extension rarely takes place, (if ever,) in the reign of frost; and among other facts which go to show that "the cold has really an influence upon the energy of the epidemic" he states that "it does not cross the ridges of high mountains."

As a faithful historian, though opposed to the doctrine of its contagiousness he recounts several instances apparently favorable to that mode of accounting for its progress. Its reported transportation by pilgrims into Samarkhand, Medina, and Mecca, has been already quoted. On the route to Tsaitsin, a Kalmuck village, Kalmytsky Bazar was attacked by cholera which spread itself in the environs of Astrakhan, "leaping from one point to another without regularity. The Lama was the first victim; an assistant of the priest next suffered, and afterwards several others in the service of the same person." The Kalmucks terrified, abandoned the sick and the dead, and fled into the Steppe, but in spite of their retreat they could not shun the malady to which they fell victims in the remote "Oulousses."

Again, "Kertch is a little town of less than 6000 souls, by its maritime position, the key of the canal of Jervi Kalch, the ancient Cimmerian Bosphorus. On the 9th of August, 1847, a case of cholera occurred on board a vessel from Taganrog where the epidemic prevailed." After this he tells us the pestilence lasted 56 days and carried off 225 victims, and goes on to remark: "The contagionists will see in this fact a point in support of their theory," but he suggests, the pestilential effluvia may have been blown thither by the wind from some other quarter.

"At Taganrog the first case of cholera occurred on the 15th of July, in a citizen who arrived the day before in good health, by the steamboat from Rostov where cholera prevailed. He died in nine hours. It was only six days *after this accident* that the epidemic declared itself in the city where it reigned eight weeks.

We shall quote but one more instance of his sort. "On the 30th July, a peasant, Andre Litvinov, who had also just returned from Rostov, was taken to the hospital at Kharkov. He had felt the first symptoms of the malady the day before, on his way, at Tchougoniev nine leagues distant. It is not irrelevant to observe that the epidemic did not yet exist in this place and did not break out there until three or four days afterward. The unfortunate peasant died the next day at the hospital. Golatchev, the *infirmier*, who had bled him, was taken on the 2d August, *after having eaten cucumbers for his supper*. The following day the mother of Golatchev, who nursed her son, and another *infirmier* named Ivanov, who had also attended Litvinov fell sick; and all the three died on the 4th of August. From that time the malady commenced to propagate itself among the inhabitants; but it was not really until the 19th that it put on the true character of an epidemic."

The most exacting contagionist can demand nothing more clear and pointed than the above statements. Thousands of such have been collected during the two histories of cholera, which have been so abundantly written. But there is one point to which sufficient attention has not been directed. It is the interval usually, if not uniformly noted, between the occurrence of the first case in any newly-invaded locality, and the explosion of the disease as an epidemic. Why this interval? The vague and undefined negations of the non-contagionists afford not even a conjectural explanation. When cholera assails New-York, the Five Points will not be more filthy than they are to-day. When they produce one case they will be in fit condition to give existence to a thousand. But the contagionist will offer a reasonable explanation of the facts. A case occurs; from this emanates a certain amount of the infectious principle; then another and another, until the atmosphere, filled with contagion, infects all who are predisposed, or who are not guarded by some happy inaptitude to receive the impression.

We must not omit to set down here such information as we have been able to gather, concerning the treatment of the pestilence at the various places where it has been encountered by the profession.

Notice has been already taken of the idea which suggested itself early to certain physicians, and which seems to have met with some favor in the eyes of Dr. Verrollot, that cholera was identical in source and nature with malarial diseases. He alludes to Dr. Ferri, one of his predecessors, "a distinguished physician of the faculty of Paris," as having published, in 1832, a pamphlet upon cholera, which he named "a pernicious algid fever,"—"fievre pernicieuse algide." His "ingenious theory" we leave to be inferred by the reader; his practice was as follows: "After an abundant bleeding as a derivative means, he administered as soon as possible, the sulphate of quinine in large doses. This medication, he says, is infallible when timely applied; it succeeded even in desperate cases; out of 162 choleric patients thus treated, 134 were cured. His observations were made at Constantinople, in July, August, and September, 1831.

Saratov was the locality most remarkable for the large proportion of deaths from cholera, which amounted on the whole to 76 and a fraction per cent., (more than three-fourths of the sick,) 2,240 in 32 days of August and September! He may well say that "the treatment was little satisfactory. No regular or experimental method was followed. From venesection to the Elixir of Voroneje the results were almost identical, that is, negative. They even affirm that the boasted elixir was more injurious than useful. There is but one medicine from which the physicians of Saratov seemed to have derived benefit, and that was the root of ipecac., administered as an emetic in the commencement of the attack. This prescription often caused the disease to disappear as by enchantment."

At Kazan the disease prevailed 68 days, in September, October, and November; tempered, perhaps, by the lower heat of the advancing season, and carrying off 1208 persons; a proportion of mortality of 49 per cent. "The treatment followed by the physicians of that city, consisted principally in the methodical and opportune employment of calomel, ipecacuanha, venesection, and external stimulation; calomel chiefly was employed to combat the diarrhœa which ordinarily preceded the explosion of cholera. It was given in doses of one-fourth gr. to two grs., frequently repeated until the dejections became bilious. When there was thoracic "oppression, uneasiness at the epigastrium, heavy headache, numbness of the extremities, they had recourse to an emetic of ipecac.; and it was observed that vomiting of bile was always followed by amelioration. In plethoric subjects it was found proper to practice venesection before giving the emetic, but generally speaking, sanguine emissions seemed hurtful rather than useful. If these means did not arrest the progress of the disease, the physicians, always with the purpose of restoring the biliary secretions, returned again to calomel, of which they increased the doses sometimes to 10 grs. every hour, or even oftener. Concurrently with the internal treatment, they stimulated the skin with irritating frictions, surrounded the sick man with bricks, bags of chaff or oats, or ashes strongly heated, and eulogize loudly the effect of dry heat thus applied. Towards the close of the epidemic it frequently transformed itself into a bilious intermittent fever, with hepatic irritation. In this case they again gave calomel, but in smaller doses."

It was in the Caucasian provinces that the famous Elixir of Voroneje was most employed and trusted to. "At first it was thought to owe all its properties to the naphtha which enters into its composition, but ulterior experience has overthrown the hopes that had been conceived of its efficacy." Dr. P. styles the elixir *an incendiary remedy* adapted only to constitutions like those of the lower Russians, accustomed to the immoderate use of ardent spirits. We must acknowledge that the mortality was not more considerable among the Mussulmen who treated themselves generally with spirituous frictions, with water of goudron de bouleau, (tar from the birch) and fermented mare's milk mixed with garlic and salt."

The district of Bogodoukhov was one of the most fortunate localities in regard to the proportional mortality of the epidemic; which is set down here as low as 30 per cent., occurring in August, September and October. "The medication employed was generally as follows: on the appearance of the first symptoms venesection was ordinarily practised, they then gave some drops of essence of peppermint and tincture of opium. It often happened that the cure took place after the second dose. If the disease persisted, recourse was had to the dulcified sulphuric ether, or Hoffman's liquor, of which ten drops were given from time to time on a morsel of sugar. In the meanwhile the sick man was made to drink of water as cold as possible. The vomitings were sometimes combatted by the anti-emetic potion of Riviere, (?) with or without opium. The means most employed to modify the alvine evacuations was calomel, in doses of one grain every hour. If the diarrhœa was violent, four grains of Dover's powder were administered, at the same time the skin was stimulated either with hot or vapor baths, or by frictions with the Elixir of Voroneje, which quieted the spasms and restored heat to the surface."

The special treatment of certain physicians obtained celebrity. Among the names thus noted is that of Dr. Dobrourarov of Kiakhov, whose formula is given us:

"Essence of peppermint,	1 part, by weight.
Liquor of Hoffman,	6 " "
Ethereal tincture of valerian root,	8 " "

"It seems that a great many of the sick were cured by this remedy, even without the aid of a physician." The dose is not mentioned, though it is said of it, "One dose ordinarily sufficed; but it must be repeated whenever rejected by vomiting;" while heat and frictions were applied to bring on sweating.

The treatment of a Dr. Sledzievsk, of a hydropathic establishment at Kotchetka, is also said to have been attended with "numerous successes." At the first attack the patient was "made to drink a glass of very cold water, (4° of Reaumur) containing in solution a tablespoonful of kitchen salt; he was then wrapped in a sheet soaked in cold salt water and rubbed with the cloth for a quarter of an hour. Then he was wiped dry and rolled in a double coverlet of woollen, in which he lay several hours, during which they gave him, every five minutes, a large spoonful of salt water at the temperature of zero. An abundant and general sweat indicated the crisis. As the symptoms grew lighter the intervals of the above draughts were lengthened, and towards the end a warm drink was substituted to keep up the sweating."

We have thought it proper to be somewhat precise as to the treatment described. We fear that those who have read and thought most upon the subject of this terrible pestilence will be ever found most ready to acknowledge the failure of our art in contest with it. At any rate, all must admit that our practice is still unsettled, and that it is our imperative duty to examine on all sides and inquire with the utmost assiduity after better measures and remedies more effectual than any which have yet been devised for its subjugation.

We proceed to trace briefly from our other miscellaneous sources, the farther history and progress of the present epidemic invasion of cholera. Our distance from the scene of its ravages, and the paucity of our materials, will of necessity render this portion of our record desultory and imperfect; in this respect, presenting a strong and unfavorable contrast with the very minute and connected essay of Dr. Verrollot, which we trust that gentleman will be induced to bring down to the current date, and indeed carry out through the whole of its visitation, destined we fear to resemble our former experience too closely, as well in protraction as in all other respects.

On the 24th October, 1847, the first case is stated to have occurred at Constantinople; no other took place until the 31st, after which it became epidemic and raged violently. On the 26th November, it appeared at Moscow, nearly the same time of year as in 1830. In December 14th, we read of it as showing itself at Vitebsk, a place on the road from Moscow towards Prussia.

During the winter it appeared to have made little or no progress, though by no means extinguished by the low temperature. In January, 1848, we know of its existence in Moscow and Vitebsk in the north of Europe; at Orfah and Diarbekir in Asiatic Turkey; and at Constantinople in the southeast. So little was said throughout the month of February and March, that the journals of April are found to contain many intimations of a grateful or exulting belief, that it had expended its centrifugal force and died away. But these hopes were soon put an end to. In May, the capital of the Turkish empire was a second time terrified by its revival and renewed epidemic sway. In the course of that month, it spread to Marmora and Cutalia, in Asia Minor, and added new territory to its conquest in eastern Russia and Moldavia. Not yet extinct in Moscow, it did not reach St. Petersburg until about the middle of June; in the same month it was in Cronstadt, in Bucharest and at Abo in Finland. In July it scourged severely the armies in the Caucasus, both Russians and Circassians. In the same month, it appeared at Berlin. On the 17th, we hear of it in Aleppo, Asia Minor, extending in one direction; at Cairo, in Egypt, in another; and at Riga, on the Baltic, in a third: on the 26th, it was at Alexandria. In August it was raging at Berlin, and had appeared in Konigsburg, Warsaw and Vienna. Two cases are mentioned as being observed in vessels arriving from the Clyde, from the north of Europe, and one such in a ship at Trieste, from Constantinople. In September, it existed in Hamburg, where it extended widely and delayed long, affecting all Europe with expectation of its intrusion. Rumors of its appearence in various parts of Great Britain, were published from time to time, but nothing certain was known of its presence on the shores of that island, until official notice was given of cases on board a vessel at Hull, in October. About the end of that month, it is definitely stated, that several instances occurred in London, at Sunderland and in Edinburg. We need follow its route no farther. We hear that it does not spread as yet, with any considerable degree of rapidity, and we indulge the hope, tempered by serious apprehension, that it may linger and abate, repressed either by the low temperature or some of the other contingencies of the season of winter as heretofore.

On reviewing the gloomy history of its prevalence at the various points above recited, we are struck with the general correspondence of the present with the last fatal invasion of this disease, into the several countries of the civilized portion of the globe. In mode of progression, the resemblance is striking: it affects the same places, the same classes of subjects, nay the remark more than once presents itself, that its victims of to-day are the children of the parents who died of it 18 to 20 years since. The proportional mortality may be stated at about the same ratio, generally, to the whole population and to the number attacked. New remedies have shared the same defeat as the old, and no mode of treatment whatever seems to make any decided impression, on the result. Quarantine regulations and cordon sanitaires prove in general, as formerly, mortifying failures. All the old questions arise again, and are again warmly debated, with as little hope as ever of reaching a satisfactory decision. As before, all agree that the terrible influences of the pestilence are shed in most concentrated form upon the destitute, the unsheltered, the overworked, the intemperate, the degraded. It is the scourge of our vicious social state. Yet we must not deceive ourselves; we shall not be able to prevent, but only to modify its effects by any changes we may be able to make; for in tracing its course, we have met with it under every variety of circumstance and condition. Our boards of health and sanitary commissions must not promise too much, lest they deceive public expectation, and suffer from a just reäction. Cholera may reign in the sparse population of country places, though it is more despotic in the courts and alleys of crowded cities. The farm laborer and the artizan, are alike liable to its attacks. It marches over the arid plains of Arabia and Egypt, as well as through the swamps that border the Caspian sea, the Volga and the Danube. Its cause is efficient upon the steppes of Russia and amid the snows of Moscow, as well as in the paved streets of London and the steaming lanes of Cairo. We meet with it in the tent of the hadji of the desert as well as in the hovel of the beggar of St. Giles. This universality is a frightful feature, belonging to no other malady known to the human race. Science and art have set limits in a certain sense to every other pestilence; have said, "thus far and no farther shalt thou go, and here shall thy dark waves be stayed;" beyond this line of causation or predisposition we shall, some of us at least, find refuge; but in regard to cholera, we fly vainly from the city to the village, from the valley to the mountain, from the sea-coast to the far inland; wherever the social intercourse of life has reached, there we may be fatally assailed.

November, 1848.

Art. II.—*On Inflammation: Indications and Methodus Medendi.* By J. P. Batchelder, M. D. (Continued.)

Our last paper closed with the consideration of general bleeding as a measure for the fulfilment of the first indication—the diminution of the *vis a tergo*, but experience having proved that that most efficient remedy is not admissible in all cases; and that in those in which it is proper, it cannot be carried to the necessary extent with entire safety to the patient, we are, therefore, constrained to look for other means, the most prominent of which are cathartics. Like bloodletting they act mainly as evacuants; not merely emptying the alimentary canal, but depleting the vessels. As counter irritants they are sometimes beneficial. In all these respects, their modus operandi* will be readily comprehended, as coinciding with the doctrines advanced by a recurrence to them and to the axioms on which they are founded.

As a cathartic, calomel is one of the best; if not the very best. Besides its virtues as an evacuant it possesses the quality of correcting the secretions, and is therefore eligible in most cases, and pre-eminently so in those in which the secretions are much disordered or vitiated. If the patient complains of a bitter taste, nausea, sense of weight or load at the stomach, and exhibits a tongue covered with a dark or yellow fur, an emetico-cathartic, or simple emetic, followed by cathartic medicines, may be administered with the happiest effect. In many instances in which the symptoms enumerated are present, an emetic which equalizes the circulation will be of great service. In our experience, that of Dessault, a little modified, is the best. His emetic was one grain of emetic tartar in a pint of water taken at once. This dose may have been sufficient for a Frenchman; but unless the Gallic medicine is stronger than ours it will not, in a majority of cases, emeticize an American, on which account we direct six grains to be dissolved in as many table-spoonfuls of water, and one in a coffee-cupful of gruel or cold water, given every fifteen or twenty minutes until the puking commences, which should be encouraged by taking large draughts of some cold liquid immediately after each time vomiting. The patient must be instructed to imitate spontaneous vomiting as much as possible, and abstain from all efforts to assist in the operation—in other words, to let the medicine do its own work.* Emetics should be administered in the fore part of the evening, especially when we wish to break up the routine of a fever, or inflammation. The reason of this will readily occur to all. As an emetico-cathartic, the following compound has much to recommend it:

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* See remarks on Counter Irritants, page 27.

℞. S. m. hyd.	grs. xij.
Pulv. antimonialis,	grs. vj.
Tart. antim.	gr. j.

Mix. To be taken at once in a little syrup.

The quantity of tart. antim, may be increased, diminished, or entirely omitted, as the case may require. This dose, if not sufficiently active as a cathartic, may be followed by salts and senna, or by salts only. When there is bile in the stomach the antimonial powder in doses of from six to ten grains is a sure and gentle emetic. The pulvis antimonialis, having lost favor with the profession, on account of alleged inefficiency, is rejected by some and sparingly used by others. Having employed it a great deal during a large portion of his professional life, the writer holds it in high estimation in febrile and inflammatory affections attended with considerable excitement. If preceded by bloodletting and cathartics proportioned to the severity of the case, it will seldom disappoint the expectation of the practitioner. The failure to produce the desired effect has probably arisen from one or more of the following causes—the bad quality of the medicine, too small doses, or omission to bleed and catharticize previous to its administration. Instead of being small, the dose should be as large and as often repeated as the stomach will bear. When saline cathartics are indicated, or from any cause preferred, the following is recommended, which occasionally acts as an emetico-cathartic:

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* In further illustration of the doctrine promulgated in these papers, we remark that the stomach belongs to organic life, and having a sphinctered outlet is governed by the same laws which govern all other organs of that class, as the bladder, etc. When that viscus acts gently the sphincter at the pylorus relaxes, and suffers the contents to pass, and no vomiting ensues; but if it act irregularly or violently, as when an emetic has been taken, the sphincter does not relax; but holds fast, and prevents the passage of the contents in that direction; and they are forced upward through the cardia, which constitutes vomiting; thus far the operation pertains to organic life and the patient suffers little distress from it; but why should he abstain from voluntary efforts? Because the muscles of volition, the organs of locomotion, experience fatigue which is peculiar to them; therefore if they are not exerted the vomiting will produce little or no exhaustion, or sense of weakness; indeed but slight disturbance in the system, a result ofttimes very desirable when patients requiring an emetic are much debilitated.

℞. Sulph. magnes.	℥ij.
Sulph. sod.	℥i.
Tart. antim.	grs. iv.

Mix and dissolve in eight ounces of water. Dose, half or two-thirds of a wine-glassful every hour, hour and a half, or two hours, until it begins to operate.

In affections of the brain, requiring active catharsis, the following will act promptly and efficiently :

℞. Aloes, calomel and gamboge, āā	℈ij.
Tart. antim.,	grs. vj.
Croton oil,	gtt. ij.

Mix and make into a mass, and divide into 20 pills—one to be taken every hour or two, until full catharsis is produced.

We have extensively used tart. antim. in the treatment of inflammation—particularly pneumonia in its first stage. Although of no great value in pleurisy, its use is not prohibited when inflammation in the lung has extended to the pleura. The writer's method of giving it, in that disease, is to begin with a quarter of a grain once in twenty or thirty minutes, until two doses have been taken, when half a grain should constitute the third dose, which is to be repeated in half an hour; at the end of the next half hour a grain should be administered. If given at such short intervals, the stomach and intestines soon lose their susceptibility to its impression, and seem not to be at all affected, even by enormous doses.* As soon as the disease seems to be pretty decidedly checked, or subdued, which it will be in two or three days, the medicine should be discontinued altogether or partially, as the case may require, and mercury given, which will prove much more beneficial in the second stage than antimony. If the disease has passed the first stage the antimony should be withheld and the mercury given.

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* Connected with the repetition of emetic medicines, particularly tart. antim., is a fact of considerable practical importance: If a full, or rather over-dose of that article, or of ipecacuanha, (and perhaps of most other emetic drugs,) is given, and several or many repetitions are required, the succeeding doses may be regularly lessened, say one-fourth each time, with no diminution of effect. The writer has known a patient in the habit of taking ipecac. as an emetic, to be at last as effectually vomited by one-sixth of a grain as by twenty at first. In the treatment of all such diseases as require frequent vomiting, we may avail ourselves of this principle. On the other hand, if we commence the use of these articles in minute doses, and repeat them at short intervals, the system will soon lose its susceptibility to their peculiar stimulus, and the dose may be increased *ad infinitum*, almost without any appreciable effect. If repeated every twenty or thirty minutes, the dose may be doubled every other time, until it becomes very large ; and yet no emesis or catharsis follows. Augmented thus, as by the rule of geometrical progression, the action of the heart is much lowered both in force and frequency, and the inflammatory affection disappears, as suggested in the text—why or wherefore we cannot exactly tell. In the administration of narcotics, particularly opium, the same principle holds. In some cases, the long-continued use of remedies of this class is necessary. As in the former example, the system loses its susceptibility for their particular impression, and the dose must be increased to a frightful extent ; nor is this all—there is great danger that the habit, dreadful as it is, of opium taking, or rather opium eating, will be formed, and then the fatal drug cannot be dispensed with. It is of great importance to avoid these consequences, which may be done by making the first dose considerably larger than is demanded by the exigencies of the case, and each succeeding one less and less : suppose a case which will probably require the repetition of an anodyne two or three times daily, and that forty drops of laudanum is quite sufficient to produce the desired effect—fifty-five or sixty instead of forty should be administered at first, and each subsequent dose lessened one drop, perhaps two. In this way the dose will be continually getting smaller and smaller, while the effect remains the same, and the destructive habit is not formed. If the dose (40 drops) be given in the usual manner, after a short time the system, having lost its susceptibility to that dose, will not respond, and the quantity must be

SECOND AND THIRD INDICATIONS OF CURE.

The second indication is: to diminish the impression made upon the capillaries and pores by the impulse of the fluids impinging against their inner surfaces and the effect of that impression. The third indication is, to lessen or take off the resistance of the pores.

As these indications are so intimately connected, and the remedies employed for their fulfilment so analogous, we shall consider them together.

It will be readily comprehended how lessening the action of the heart weakens the impression of the fluids upon the capillaries and the pores, and so contributes, as far as it goes, to fulfil the second indication; and also how that which weakens the forementioned impression will likewise lessen or take off the resistance of the pores, which constitutes the third indication; without the fulfilment of which, it is believed, that no inflammation of much standing will be cured.

That abatement of the momentum by the abstraction of blood is not of itself capable of preventing the morbid impulse, or wholly obviating its effects, is clear from the fact that the vessels contracting *pari passu*, with the abstraction of their contents, are in perpetual contact with them, consequently the impulse must be made and felt in proportion to its force and the sensibility of the vessels; hence the necessity of the second indication which is to diminish the impression and its effect. It is well to remember that the fulfilment of this indication contributes to that of the third; for if we lessen the force and effect of the impulse, the sphincter or pore will, as we have endeavored to show, relax; and furthermore, it may be proper to remark in this place, that although we have made three distinct indications of cure, they are so closely, naturally and philosophically connected that they almost necessarily resolve themselves into one, viz., the abatement of the force and effect of the impulse—that being done the pores will relax and the vessels be emptied or depleted and the cure accomplished. The medicines adapted to the fulfilment of these indications are of two kinds—such as act on the system generally, and such as act locally on the part affected. The former, by equalizing the circulation, diminish the impulse; and some of them, into the composition of which narcotics enter, lessen the effect of that impulse by obstructing the vascular sensibility. Belonging to this class are sudorifics—medicines of great importance, and by no means to be dispensed with; the best of which is the antimonial powder, either alone or combined with opium, by which its efficacy is in many instances increased—especially if the rules laid down have been observed. The Dover's pow-

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increased in order to secure the effect, and ten drops are added; in a few days another addition must be made, and another, and another; and so on, until half an ounce, instead of 40 drops, is demanded; and what is worse, even though the disease is removed, the patient is cursed with a habit more dreadful than death itself.

der, by itself, in as large doses as the stomach will bear, or combined with the pulvis antimonialis, will be found of great utility. Instead of the Dover's powder the writer has often substituted one composed of opium, camphor and ipecac., each one part, and nitrate of potash two parts; a preparation which certainly adds considerably to the efficiency of the antimonial powder. The dose may be regulated by the quantity of opium required in each individual case.

The old-fashioned compound, the spiritus Mindereri, is a valuable remedy; but which often fails from not being rightly administered. It should be given warm, in ounce doses, every hour or two, until the perspiration appears. The patient ought to be kept in bed with more than ordinary covering and made to drink freely of warm liquids. If there be much irritation, laudanum, or the elixir paregoric in appropriate doses may be added from time to time. Instead of being given alone, it may alternate with the sudorifics before mentioned, in which case it must be less frequently repeated.

The colchicum autumnale is often employed with advantage, especially after bloodletting. Combined with the digitalis, it is a tolerable substitute for the lancet in subjects not plethoric or athletic. By reducing the frequency and subduing the force of the heart's action, and promoting secretion and excretion, they coöperate with other evacuants in fulfilling the first indication; and by their narcotic influence are more capable of contributing to the fulfilment of the others. Calomel as an alterant, either by itself or combined with the antimonial powder—two grains of the former with four or six of the latter may alternate every fourth or sixth hour with the colchicum. In severe cases as in croup, laryngitis, etc., calomel must be given more frequently and in larger doses, with a view to its specific effect, or to the changes it is supposed to produce in the blood.* When colchicum has produced its specific effect,† even in a moderate degree its use may be suspended and the sudorifics continued. Digitalis, acting as a sedative, is a medicine of considerable power. Reducing the frequency and subduing the force of the heart's action, like venesection, it diminishes the *vis a tergo* and the impression; and in consequence is adapted to the fulfilment of the first and second indications, but must not in urgent cases supersede the use of the lancet. How much effect the foxglove has on the capillaries and pores, independent of its influence on the heart, is difficult to determine. Its narcotic and particularly its sedative powers, are too considerable to be overlooked. The forms of inflammation in which the writer has employed and found it most useful, are pleuritis and meningitis. In all chronic inflammations, like colchicum, it will be found most beneficial when the urine contains an undue proportion of lithic acid or albumen ;* without one or the other of these contingencies neither of those medicines will be of much service. If the urine be merely turbid, or incline to a bloody appearance, as it sometimes does in chronic inflammation and in dropsy, very satisfactory results may be expected to follow the use of the digitalis.

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* The writer, judging from his own observation and experience, feels warranted in saying that very few cases, if treated on the principles inculcated in these papers will require or even justify the use of calomel to the extent deemed necessary by many practitioners.

† By the specific effect of colchicum, purging is not meant, that being unessential to its peculiar influence as a therapeutic agent; but may be looked on rather as a sign of its having taken effect. In fact its purgative operation seems not to differ materially from that of other cathartics.

TOPICAL REMEDIES.

The second class of remedies for the fulfilment of these indications are those which act locally; the object of which is to diminish the action of the vessels and lessen or take off the resistance of the pores in the diseased part. Their use presupposes the employment of such general remedies as may have been required.

LOCAL BLEEDING,

By cupping and scarifying, or by leeching, stands at the head of this class. Whatever causes the vessels to act less violently, or gently, will induce the pores to relax. By directly depleting the inflamed vessels topical bleeding lessens the cause of their distension or over-distension, by which their efforts to expel the contained fluids, or resist their distending force, will be rendered less intense as may be inferred from the mitigation of symptoms which follows this mode of depletion, and is commonly more marked if preceded by the general remedies which have been recommended. Moreover, local abstraction of blood frequently reduces the action of the heart; lowers the sensibility of the vessels; diminishes the impulse and its effect, and contributes in all these ways to restore the equilibrium of action, without which the pores will not relax and allow that effusion of lymph and serum which empties the vessels and completes the cure. In producing relaxation of the capillaries and pores, this method of bleeding acts upon another principle besides that of depleting the vessels.

By assuaging pain and mitigating suffering, it is equivalent to a pleasing impression and therefore causes relaxation; pleasant impressions induce relaxation, disagreeable impressions excite contraction and resistance, therefore in the treatment of inflammations, our applications should be made in accordance with one or the other of these principles. On account of the pain or irritation occasioned by cupping and scarifying leeching is preferable in superficial inflammations. When deeper seated, or when internal organs are involved, the former is to be preferred. In whichever way the blood is drawn, the quantity must be regulated by the judgment of the practitioner; the constitution, age and circumstances of the patient, and the effect of the depletion being taken into the account.

EXTERNAL APPLICATIONS.

The solution of the acetate of lead has been employed time out of mind, as an external local remedy, and in many instances with probable advantage. Although much used as it has seemed rather from imitation and habit, than a settled conviction of its real utility, it may be as good as almost any thing else with which we are acquainted. With laudanum or opium superadded, it certainly has a soothing and consequently beneficial effect; but whether it is any more useful than water with the aforesaid additions is somewhat questionable. The efficacy of saturnine applications has been attributed to a sedative power which they were supposed to possess. If they really had any such virtue, they would be entitled to great consideration. Could they lessen sensibility or vascular action, they would diminish the impulse of the fluids and its effect on the vessels; but it is to be regretted that the testimony of the profession is not very decided in their favor.

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* In all cases of pneumonia, and in most cerebral affections, the state and condition of the kidneys, and of their secretion, should be inquired into with great care.

The solution of the acetate of ammonia, is an excellent application and may be used like the foregoing, with or without opium or laudanum.

Evaporating liquids, or such as produce cold, as ice-water or pounded ice, may be applied. The latter, on account of the absorption of the caloric of solution, (140° Fah.) is potent for good or for evil; we are therefore bound to consider in this place, the principle upon which cold, as an antiphlogistic remedy, acts. Causing the contraction of vessels subjected to its influence, it may be resorted to before the action of the heart has been roused, and while the local contractions which it induces, is able to resist effectually the *vis a tergo*:* but when the vessels have become over-distended, and the *vis a tergo* so strong, that the contraction produced by the cold is insufficient to force the fluids out of the capillaries of the part, the pain will be aggravated by cold applications. After bloodletting, catharsis, etc., by which the heart's power and action are lowered, they may be very proper and useful, but if the powers of life have been too much exhausted, such applications may produce a degree of contraction incompatible with the vitality of the vessels and gangrene ensue. The principles laid down in a former part of this paper in relation to pleasant or unpleasant impressions come in here most happily. When applications of low temperature are grateful to the feelings of the patient, they are proper; if disagreeable, they are improper and should give place to such as are warm.†

These principles furnish an infallible rule respecting the temperature of such appliances and settle the mooted question, whether lotions, poultices, etc., to an inflamed part, should be cold or warm.

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* Hence the utility of cold water applied immediately after a sprain or bruise, or the infliction of a wound by accident or by design, as in surgical operations. For many years past, the writer has been in the constant habit of using cold water after his operations, as soon as the plasters have had time to become well set, and to continue it for several days, say five or six.

† In making applications to an inflamed eye, even this rule should be followed with some caution. In some cases of chronic ophthalmia, the same effect is produced by the use of water. In ophthalmia, cold applications should be applied very extensively, to the whole head or most of it. In general they had better be tepid than warm; when the latter are employed, it should be only for a few minutes at a time. The objection to the long-continued application of poultices or fomentations to the eye, grows out of the anatomical structure of that organ. In that form of disease called "morbid sensibility of the retina," the writer has found that cold water to the eyes always keeps

OF COUNTER IRRITATION.

In the deeper-seated inflammations, and especially those which involve internal organs, great benefit may be derived from stimulating applications; but for want of a correct knowledge of the principle upon which their utility depends, it is to be feared that more hurt than good is not unfrequently done by them. The principle is—the stronger external, effaces the weaker internal impression. In the treatment of perhaps every case of deep-seated or internal inflammation, there is a "blistering point"—in other words, a time when irritating or stimulating applications should be made; a condition which cannot be recognized with certainty without a correct understanding of the principle on which rests the utility and safety of those applications. The object of blisters, rubefacients, etc., is mainly to relieve pain or uneasy feeling. The pain of inflammation, as we have seen, is caused by an over-distended or resisting state of the capillaries. If those vessels can be induced to relax, the pain and suffering will cease. Now, if the disagreeable impression made by the blister, which is external, be stronger than that made within by the fluids, the vessels not feeling the internal impression, relax, and the pain is relieved —entirely, if the relaxation be complete. If the impression of the blister be not, however, stronger than that made by the fluids within, the symptoms will be aggravated; there may, indeed, be no vesiccation, because the internal is stronger than the external impression. The aggravation of the symptoms is explainable in the following manner: the impression of the blister has been sufficiently powerful to induce the vessels to relax or forego their resistance; but the *vis a tergo* has not been suitably diminished, of course the relaxed vessels will be again crowded, and as much over-distended and act as violently as before; for which reason the pores will not relax, consequently the pain of resistance will be renewed. Before the blistering or stimulating application can be made with prospect of relief, or even without the hazard or risk of injury, the following questions must be answered in each individual case: Will the irritation of the blister induce the vessels to relax? And if so, has the action of the heart, or the *vis a tergo*, been so much subdued that it will not force the fluids into the diseased vessels, and cause them to be again over-distended, and therefore prompted again to resist painfully? The stimulating, or "blistering point," is then attained only when the vessels will relax in consequence of the application, and the *vis a tergo* so much abated as not to cause them to be again over-distended. Prior to this, a blister will certainly produce the ill consequences to which we have alluded. In the treatment of affections of the joints, the writer has most frequently noticed this error in practice. He has witnessed many instances in which practitioners have applied a few leeches to a joint, and

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up or aggravates the difficulty; so much so, that he does not allow patients affected with it, to wash the eye at all, nor in bad cases, the upper part of the face, much less to let any get within the lids. In such cases, patients are in the habit of applying the cold water to the eyes freely, and not unfrequently open them when submerged in it, and they will tell you that the eyes invariably feel the better for it, which is undoubtedly true, but this effect is only temporary, the disease is no less certainly kept up and aggravated by the practice. Our principles furnish the explanation.

followed them with a large blister; the result was what might have been anticipated by one familiar with the principle—the joint became swollen, hot, and painful; requiring a long succession of fomentations, poultices, and general treatment, for the removal of the mischief done by the ill-timed blister. He has likewise often seen the same bad practice enacted in pneumonia and pleurisy—particularly the latter. The patient had been bled, purged, blistered, and, as a matter of course, made worse by the last remedy, which ought to have been deferred until the action of the heart had been subdued to the degree required. In all such cases, the blister, when too soon applied, may indeed cause the pores internally to relax; hence the effusion which sometimes (in truth not very unfrequently) follows the application of a large blister to the chest in pleurisy, to the abdomen in peritonitis, or to a joint in synovitis, before the inflammation has been sufficiently subdued by bleeding, etc.* The vessels, it is true, have been emptied and the inflammation cured by the effusion; but another disease, as dropsy of the chest, abdomen or joint, is produced—quite an undesirable result. Effusion is likewise very apt to follow the application of a blister in phrenitis, and many a child has lost its life in consequence. After effusion, blistering, by promoting absorption, may be exceedingly proper and useful.

In one other respect this class of remedies deserves consideration. Inflammation in the incipient or forming stage is often removed at once by the fortunate application of a local stimulus; we say fortunate, because the principle on which it acts under such circumstances has not been very clearly pointed out or very well understood. The vessels directly involved are crowded and over-distended with blood, while those immediately surrounding retain their natural condition, or rather assume the attitude of resistance, which prevents the over-distended vessels from forcing their contents onward, and in consequence returning to their normal state. If now a strong stimulant is applied which makes a more vigorous impression externally than is made internally by the fluids contained in the aforesaid vessels—they will relax and give the fluids in the first a more easy passage through them and a more ready admission into the last, by which the ordinary circulation in the part is restored. In this way inflammation of the conjunctiva is cured at once by stimulating collyria; of the tonsils and throat by stimulating gargles; and gonorrhea by stimulating injections. But how often do we see matters made worse by blunders perpetrated by those who do not fully comprehend the principle upon which success is founded. The general state of the patient, that of the circulation and of the heart's action, and the duration of the difficulty, should be investigated before resorting to such measures.

LOTIONS, ETC.

Formerly it was the custom to apply medicated lotions, but, with few exceptions, they are no better than simple water, except so far as they amuse the patient or friends. Under such circumstances they will probably do the more good and for this reason it may be well to use them. Infusions of hops, cicuta, stramonium or mallows, as fomentations, are comforting and useful. Besides their sedative and narcotic qualities they make a pleasant impression which causes the capillaries and pores to relax—thus easing pain by taking off resistance.

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* I have recently seen a case of pleurisy in which a large quantity of serum was effused into the cavity of the thorax immediately on the drawing of an extensive blister on the side directly over the seat of the pain.

Poultices of bread and milk, or medicated with linseed or narcotics, are also beneficial. In a great majority of cases, however, they may be dispensed with and cloths moistened with water, or some of the infusions just mentioned, laid on the part and covered with oiled silk, used in their stead. A sponge, imbued with those liquids and applied in the same manner, will be found convenient, especially if it be desirable to make gentle pressure, the sponge being applied and bound with a bandage and moistened afterwards.

POSITION.

In conclusion—a word respecting position. This is a matter which is certainly too much neglected. Gravity, by retarding the flow of blood into an inflamed part, lessens the *vis a tergo,* the impulse and its effect; moreover, by facilitating the egress of fluids, it diminishes their distending force which keeps the capillaries on the stretch and prompts them to make painful resistance. Position is thus made to answer all the purposes of an evacuant without the debilitating effects of depletion. Let it be remembered that emptying the vessels of the inflamed part is all that is required for the cure of inflammation, consequently position, when fully consulted, greatly abates the demand and sometimes supersedes the necessity for active depletion, therefore the inflamed part should be elevated as much as is consistent with the comfort of the patient. So thoroughly convinced is the writer of the importance of position that he treats no case of inflammation, surgical or medical, without reference to it.

P. S.—In another point of view, posture is important, and in some respects corroborative of the views presented and entertained in these papers.

Early in his professional career the writer was called to amputate the limb of a patient so much debilitated that none of the gentlemen in consultation would advise to the operation, from the conviction that the patient would die in its performance—without it, all agreed that death was inevitable. After much reflection and mature deliberation he arrived at the conclusion, that, such was the weakness of the heart, if the limb was raised for a short time, nearly all the blood it contained would gravitate into the body, which would then actually contain more of the vital fluid for the support of functions essential to life than before; and furthermore that the effect might be enhanced, if needed, by the elevation of other members. Not that "rashness triumphed over caution," but confidence in the principle prevailed, and prompted to the operation. The limb was elevated to a perpendicular, and sustained in that posture until bloodless and nearly pulseless, when the torniquet was tightened and the operation commenced and finished. The other limbs were also somewhat raised and kept elevated for several days. The recovery was slow, but fortunate for both patient and surgeon, whose first amputation it was. Since then he has not unfrequently, in similar cases, resorted to the same expedient and always with satisfaction.

In extreme cases, all the limbs may be raised even to a right angle with the body, and sustained in that position for a longer or a shorter time, or until they are emptied of their blood, which may be retained in the trunk for present and temporary use, by compressing the arteries. So far as the writer knows, this practice originated with him, at the time above specified. Every obstetrician will readily appreciate its value and importance in dangerous floodings—conjoined with opium in large doses, which produces relaxation in the cerebral capillaries, it may be instrumental in saving many valuable lives by contributing to supply with blood the nervous centres whose functions may thus be kept up until the system has time to rally.

Art. III.—*A Sarcomatous Tumor, containing Hair and Stearine, Removed from the Womb.* By Gunning S. Bedford, M. D., Professor of Midwifery, and the Diseases of Women and Children, in the University of New-York.

On Wednesday, the 7th of April, 1847, Mr. D. called at my office, at 4 o'clock, P. M., and requested me to pay a professional visit to his wife. She had been attended for seven weeks by two medical gentlemen who, on the Sunday before I saw her, had voluntarily withdrawn their attendance, under the conviction that her case was beyond remedy, and with the opinion fully expressed to Mr. D. and his friends, that, in all probability, she would survive but a few hours. The husband, in his interview with me, spoke kindly of the physicians, and remarked that he was without the slightest hope, he and his friends having watched with the suffering patient the two previous nights, expecting her death at any moment. With such a representation of the case, I frankly told the husband I thought a visit from me useless, but if it would afford him any gratification I would cheerfully accompany him. He repeated his desire that I should see his wife; and, on being introduced into her chamber, I found her lying on her back, her face pale and emaciated, with every indication of excessive prostration; the expression of her countenance, too, gave evidence of great suffering. Her pulse was thready, and beat 120 to the minute. Such was her exhaustion, that, when I addressed a question to her, it became necessary for me to place my ear to her lips to distinguish her answer, and then her articulation was almost inaudible. In fact the appearance of the patient was that of a dying woman. Her respiration was labored, and the abdomen as much distended as is usual at the end of the ninth month of gestation. On percussing the abdomen I distinctly recognized fluctuation; and in attempting to introduce my finger into the vagina with the view if possible of ascertaining the character of the enlargement, I felt at the opening of the vulva a soft, elastic tumor projecting through the mouth of the womb, which was dilated to the size of a dollar piece. The parietes of the mouth of the womb thus dilated were extremely attenuated, and did not appear to be thicker than ordinary writing paper. I found no difficulty in introducing my finger between the tumor and internal surface of the cervix, the adhesion being so delicate as to yield to the slightest effort. I satisfied myself that there was no action in the womb; the patient had not experienced any thing like labor pains, and the dilatation of the cervix was the result merely of mechanical pressure produced by the tumor within the uterus. Whilst pressing gently with my finger on the tumor as it presented at the mouth of the womb, and grasping with the other hand the abdominal enlargement, I could again distinctly feel fluctuation, and found also that I comprehended the tumor between my two hands thus applied. Again, in placing my finger on the outer portion of the posterior lip of the uterus, and seizing with the other hand the upper surface of the tumor through the abdominal walls, alternately elevating and depressing the two hands, it was evident that I embraced the womb itself, which was immensely distended by the growth of the tumor. In making an examination *per rectum,* I could without difficulty detect the enlarged uterus. These circumstances, together with the important fact that the abdominal enlargement was uniform on its surface, possessing nothing of the features usually attending extra-uterine growths, such as ovarian and fibrous tumors, etc., caused me to arrive at the conclusion that, in the present case, the tumor was exclusively *intra-uterine.* It will be perceived that on this decision depended the remote hope of giving to my suffering and almost dying patient even temporary relief from her agony. Having, therefore, formed my opinion as to the seat of the tumor, and partially as to its nature, I stated to the husband, that, desperate as the case was, and imminently perilous as would of necessity be any attempt to remove the tumor in the exhausted and almost hopeless situation of his wife, yet it was my opinion that the tumor could be removed—although the *serious hazard was that she would sink under the operation.* This opinion was given emphatically, without reserve, and unaccompanied by a word of comment calculated to urge consent to an operation, which presented but little prospect of permanent relief, and could only be justified by the reasonable expectation, that if the patient should survive the removal of the tumor, her suffering would be mitigated, and her progress to the grave rendered comparatively comfortable. The opinion was communicated to the patient by her husband, and she expressed an ardent desire that the operation should be performed without delay, remarking that she was prepared to encounter every thing, even death itself, with the remote hope of temporary relief from the agony occasioned by the pressure of the tumor. The husband and friends acquiescing fully in this appeal of the suffering patient, I left the house, promising to return in half an hour and perform the operation. On my return I was accompanied by my friend, Dr. Detmold, and two of my pupils, Messrs. Burgess and Woodcock.

These gentlemen heard with me the following particulars of the case as related by the husband and sister of the patient: Mrs. D. was 47 years of age, and married in 1832. Soon after her marriage she was attacked with cholera; and during her convalescence from this disease, she miscarried. Her health had been more or less infirm for the last ten years. Her menstrual periods had always been regular, with the exception of the last year, during which time they occurred about once in two or three months, and then not freely. This she imputed to *change of life,* and the circumstance did not attract any particular attention. Her abdomen had begun to enlarge in July, 1846, and continued to do so to the present time. In January last, she suffered greatly from distension of the bladder, and could not void her urine except in small quantities at a time, accompanied by excessive pain. For this she consulted a medical man, who found it necessary to introduce the catheter, from time to time, to relieve the bladder. She commenced as early as January to be constipated, and defecation was attended with excruciating suffering. These difficulties about the bladder and bowels continued to increase, and for weeks before I saw her, she repeatedly passed over ten days without an evacuation—medicines having no effect, and injections per rectum immediately returning, without bringing away any fæcal matter. Her urine was voided in very small quantities, not more than two table-spoonfuls at a time, and it was nearly the color of blood. It was impossible for her to evacuate the bladder except when resting on her elbows and knees; this position, however, occasioned so much fatigue that, in her present exhausted condition, she could not avail herself of it. In a word, the agony of this unhappy sufferer was induced almost entirely by the pain consequent upon the attempt to evacuate either the bladder or rectum. With these facts before me, together with a knowledge of the position and bearings of the tumor, it was not difficult to arrive at the important conclusion that the pain and distress in the bladder and rectum were due to *mechanical pressure of the intra-uterine growth.* At my request, Dr. Detmold examined the patient; and, in view of all the circumstances of the case, concurred with me in opinion that, *without an operation, she could survive but a few hours; whilst, if she did not sink under the attempt to remove the tumor, her distress would be sensibly palliated, and her life possibly prolonged.*

With the understanding, therefore, of the uncertainty and immediate danger of the operation—an understanding fully appreciated by the patient and her friends—I proceeded to remove the tumor in the following manner:—A mattress was arranged on a table, and Mrs. D. placed on her back, her hips being brought to the edge of the mattress, the thighs flexed on the pelvis, and an assistant on either side to support the feet and limbs. I then introduced the index-finger of the right hand into the womb, steadying the tumor with the other hand applied to the abdomen, and succeeded in directing my finger its full length between the tumor and cervix of the uterus; this was done with great caution, for the parietes of the cervix were so extremely thin, that indiscreet manipulation would almost certainly have produced rupture of the womb. With the view, therefore, of preventing such a result, I thought it more desirable to break up the adhesions of the tumor simply with the finger, than incur the hazard of introducing instruments into the uterine cavity. In proportion as the adhesions yielded, I grasped the tumor; and, without much effort, was enabled to remove it with my hand in fragments. Having brought away in this manner all the solid portions of the tumor, and carrying my hand well into the cavity of the womb, I distinctly felt a sac pressing, as it were, against my finger. This I immediately ruptured, and there escaped by measurement three quarts of fluid, which resembled in all its physical qualities, with the exception of the smell, pure pus. This fluid was collected in a vase as it passed from the womb, and, half an hour afterwards, on examining it, we found it no longer liquid, but presenting a solid mass, precisely like *hardened lard*. It was evident, therefore, that the temperature of the body kept this substance in a fluid state. As soon as the fluid had escaped, I introduced my hand still higher up, and felt something resembling, in touch, human hair. It was, in fact, *a large mass of human hair matted together*, with no other vestige of an embryo—there was no trace of scalp, or any thing else, save the hair. I grasped this body, and removed it from the womb entire, it being so compact as not to separate in fragments. The womb, thus freed of its contents, contracted; and there was no loss of blood. After the solid parts of the tumor had been removed, there escaped from the bladder an incredible quantity of high-colored urine, which gave such relief to the patient that it caused her to exclaim in simple yet, emphatic language, "Doctor, I am in Heaven!" It may here be asked, why the catheter had not been introduced before commencing the operation. In answer, I would merely remark, that every proper attempt had been made to effect this desirable object; but it was found physically impossible, without inflicting serious injury on the patient, from the pressure of the tumor on the neck of this organ.

Mrs. D. bore the operation with a heroism which greatly surprised us; and although it became necessary to suspend occasionally all manipulation to rally her from fainting, which occurred three different times; yet, considering her extreme prostration, it may well be deemed a matter of amazement that she did not sink. The operation being completed, the patient was placed comfortably in her bed. In the course of half an hour, her breathing became easy, the pulse fell ten beats in the minute, and there was an expression of composure about her countenance, which gave sincere joy to all of us, feeling as we did an intense and unaffected anxiety as to the immediate issue of the case. Without the aid of an anodyne, she fell into a sleep, which lasted six hours, the first repose she had enjoyed for many long nights of agony. When she awoke, she appeared greatly refreshed, and although extremely prostrated, she seemed to take pleasure in gazing on her friends, to each of whom she gave a look of recognition. On the morning after the operation, her bowels were spontaneously and freely moved, a large quantity of hard fæcal matter passing away. Subsequently, simple injections of warm water sufficed to afford her a daily evacuation, and the urine was discharged freely and without obstruction. Mrs. D. continued to improve in appetite, digestion, and strength, and although her friends were admonished not to be too sanguine as to her recovery, yet they regarded the fear of any other issue as utterly groundless. On 22d of April, fifteen days after the operation, she began to fail; and in defiance of every thing which could be brought to bear in her case, she continued to sink, and expired on the 25th of April, having survived the operation eighteen days.

I have no doubt that the anomalous mass found in the womb of this patient, was the product of a *blighted ovum*, and it may be reasonably asked whether her chances of recovery would not have been enhanced, if the tumor had been removed at an earlier period, before the powers of the system had become exhausted by long continued and uninterrupted suffering.

The adhesions, it will be remembered, of the shapeless mass to the internal surface of the womb were slight. The stearine, which escaped after the sac was punctured, I regard as nothing more than the fœtal brain and other fatty portions of the system in solution. These circumstances, together with the quantity of human hair removed from the womb, and the fact that the tumor was comparatively of rapid growth, are, in my judgment, strong proof of previous conception.

I cannot conclude this paper, without returning my thanks to Dr. Detmold for his prompt and efficient aid, not only during the operation, but also in the subsequent attendance. My pupils, Messrs. Burgess and Woodcock are also entitled to the highest commendation. Throughout the case, they exhibited a zeal worthy of the profession, and which may be looked upon as an index of their future success.

ART. IV.—*Extracts from my Note-Book.* By LEWIS A. SAYRE, M. D. Prosector to the Professor of Surgery, Coll. Phys. and Surg., University of the State of New York.

Case. 1.—*Chorea induced by anxiety, on account of a deformity; and cured by removal of the same.*

Mary Pheeny, Pearl-street, aged sixteen, was brought to me in March, 1848, for chorea, with which she had been afflicted for two years previous, and had also had several epileptic convulsions.

She was a large, robust, healthy-looking girl, but exceedingly desponding and gloomy, almost an idiot in appearance, wishing to be by herself and seldom speaking to any one.

She was strangely deformed in her feet and one hand; having ten toes on her left foot, and eight on the right, with their proper number of phalanges, and each articulated with a separate metatarsal bone, except the second and third on the left foot, which were joined together, so as to resemble one toe with two nails, which gave that foot the appearance of but nine toes: but after their removal I found a double row of phalangeal bones, enclosed in a common tegumentary envelope.

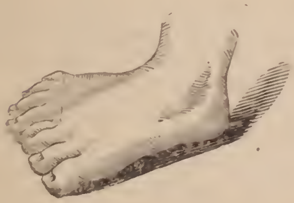
On the right hand she had five fingers, beside an extra joint upon the thumb.

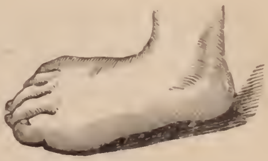
Upon taking hold of her hand, my attention was drawn to her extra finger, and when I alluded to it, she gave a hysterical sob, followed immediately by a severe convulsive fit, caused, as her mother informed me, by my allusion to her deformity, as she was exceedingly sensitive upon that point.

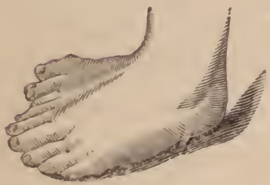
After talking to her mother a few moments, she wished me to look at her feet as they were also deformed; and upon my examining them, another convulsive fit was induced, which led me to believe, that the cause of disturbance in her nervous system, upon which these fits and the chorea depended, was anxiety of mind about her deformity: and she had pondered on it so constantly, and let it obtain such complete control of her nervous system, that any allusion to her misfortune, would be immediately followed by a fit.

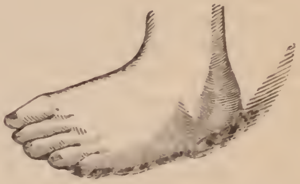
After examining the case carefully, I found every organ healthy, and all their functions properly performed. She had been under treatment for some time past, for suppressed menstruation, which had been successful; and for the last two months, her menstruation had been perfectly regular.*

From that moment her countenance assumed a cheerful smiling aspect, she laughed and talked half hysterically, and walked about with almost a phrenzied delight, and exhibited not the slightest evidence of chorea. She was exceedingly anxious to have the operation performed at once, but it was deferred in order to take the casts, from which the accompanying drawings were made.









On the 9th March, assisted by Drs. Trudeau and Van Beuren, I removed her supernumerary toes, having first put the patient under the influence of ether, which had the desired effect of benumbing all sensation, and when restored to consciousness, she expressed great surprise at their removal.

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* Dr. Porcher, now of Charleston, who treated her for some time, has published the case in the Charleston Medical Journal and Review, for March, 1848, and states that she was perfectly cured in four weeks, by the use of carb. iron and rhubarb.

If he had had reference to her menstruation simply, he would have been correct. But in including in the word cure, the chorea and epilepsy under which she labored, (as I presume he does, for he has headed his article, " St. Vitus' Dance") he is evidently mistaken; for her gait was exceedingly unsteady when she came to my office, and the fact of her having two convulsive fits upon my alluding to her deformity, proves that her epilepsy and chorea still continued—and it is to correct this statement, that I have by the advice of several medical friends made the case public.

She was not relieved of her chorea and epilepsy, until she was assured that her deformity could be removed: from that moment her countenance assumed a cheerful aspect, and her chorea and epilepsy left her entirely, without any medical treatment whatever, and have never returned, a period of more than seven months.

The parts were brought in close apposition by sutures, straps and firm bandages, and dressed with cold water. Union of the whole wound, in each foot, took place by first intention without the formation of any pus, and in twenty-three days after the operation, she walked to my office, (nearly one mile) and the second casts were taken from her feet, from which the improved drawings were made.

The most singular feature in this case is, that from the moment she became convinced that her feet could be improved, her chorea left her and has not returned; neither has she had a single epileptic convulsion.

Remarks.—The mother in this case, attributed the deformity to a fright from an elephant, and as her friends testify, repeatedly spoke of it previous to the birth of the child—whether the fright had anything to do with the peculiar development or not, it is impossible for me positively to say. But inasmuch as a number of well-attested cases have occurred, in which the mother has, previous to delivery, accurately described the deformity, which has, been found to exist and agree so exactly with her previous description, that it becomes important for us to attempt at least, to ascertain the sympathies existing between the mother and child, and the *laws* which govern those sympathies, and trace cause and effect if possible.

If, for instance, we find, that from some horrid sight or loathsome object presented to the female during pregnancy, she becomes impressed with the idea at birth her child will bear this or that particular deformity, and time proves her fears well grounded, and her suppositions are found true, it is but reasonable to suppose (from analogy) that could we have made an equally strong impression of a different kind, we would have produced a different kind of growth or formation according to the impression under which she labored.

We all admit, that it is by the nerves we receive impressions, and that it is through them, that the will is conveyed to the different parts of the system: that the vessels are the executors of the will, and that secretion, absorption, the different growths, developments, etc., are the result of this work, carried on or performed by the vessels, and controlled by the nerves. Or in other words, the brain and nervous mass superintend or order; the vessels obey these orders; and the different growths, etc., are the result of the work.

If, then, the nervous system or controlling power be disturbed, the orders are given wrong, the vessels obeying these wrong orders, and acting in compliance with them, an unnatural or deformed product, is the necessary result.

We all admit again, that the child has not an independent existence until *extra-uterine* life; neither has it an independent will: but it also is dependent upon the mother, is under her control, and must of course act in accordance with hers.

If then, the will, thought, impressions, mind or controlling power, so to speak, exist entirely in the brain and nervous masses, when endowed with life, (as without them, we can receive no impressions,) and if the vessels act entirely under the control of these nerves: and the different growths, developments, etc., are the result of the action of these vessels; and if the will of the child is dependent entirely upon that of the mother, it follows, as a matter of course, that the development of the child being the result of the action of its vessels, which vessels are controlled by its nervous system, and it again, entirely dependent upon the mother, that these various developments must be in accordance with the various impresssions, made upon her mind.

Case 2. *Spina Bifida—tumor removed by ligature.*

S. F., Avenue B, aged two years, was brought to me on the 1st of June, 1844, with a fluctuating pendulous tumor, about the size of a hen's egg, with a small neck; situated on the back of the neck over the sixth cervical vertebra, which the mother stated was of its present size when the child was born. It had several small blue spots on its surface, the size of a sixpence, where the integuments appeared thin, and there was danger of its bursting. There was no pain or tenderness on handling. The child was well developed and perfectly healthy, had always been so, had never had fits or convulsions; sensation and motion perfect, and no defect in the bony arches could be detected. From these circumstances, I advised its removal, and Dr. Parker concurring in this opinion, I proceeded to effect it, at the college on the 5th of June, assisted by Drs. Parker and Watts, by passing a needle through the centre of its neck, armed with a double ligature, and after tying one on each side, passed two circles entirely around the neck, drawing them so tight as to strangulate the mass entirely, and then excised it with one stroke of the knife. It was then covered with plaster and the ligatures left to slough away; about a teaspoonful of blood was lost. The child cried during the operation severely, although previously it had given no evidence of pain even under severe pressure.

Anatomical appearances.—Upon examining the tumor, it was found to consist of a firm cyst of condensed cellular tissue, and filled with about ℥2 of pale fluid; to our surprise it contained two large nerves, which came from the spine and terminated by numerous branches in its circumference, giving the internal appearance of the tumor, a resemblance to the cells of a honey-comb, one of them was as large as the median of an adult.

Not expecting to find these nerves, as there was no sensibility to the tumor, I was rather alarmed, and anticipated serious consequences, and watched the case very closely. No unpleasant occurrences took place, the child ate, drank and slept well, in fact did not, after the first few hours, seem to be affected by the operation in the least. And on the 23d day, the ligatures came away leaving the wound entirely healed, and the scar resembling that from vaccination.

Query.—Was not my success owing entirely to the strangulation of the ligature, thereby cutting off all communication with the spinal column, and in causing it to heal over close to its origin, and thereby supplying the place of bony arches?

Case 3. *Spina Bifida, with post-mortem of vertebræ.*

Mrs. B., 49 Anthony-st., was delivered in Dec. 1845, of a male child, with spina bifida of the four lower cervical and the first dorsal vertebræ. There was a large transparent tumor, the size of a man's fist, with the integuments distended almost to bursting, and the spinal column separated nearly two inches. Deeming the case hopeless, nothing was done except directing the mother to be careful and not to let the child lie upon its back, nor allow any pressure upon it. Notwithstanding the unfavorable prospect, the child continued to grow and improve rapidly, and at the end of a year, the bony arches had been completely thrown across the tumor, and the spinous processes could be distinctly traced, the tumor shrivelled down like a scrotum and presented a very similar appearance to the case just related above. I proposed in a few months operating upon it in the same way as in the former case; but unfortunately the child had severe enteritis and died in Feb. 1847. I removed the whole cervical and dorsal portion of the spine with the nerves, and found at the seventh cervical vertebra a small hole, through which passed three or four small nerves, which terminated in the tumor outside, and was precisely similar to the one I removed from Mrs. F.'s child.

This specimen is in the museum of the College of Phys. and Surgeons.

Art. V.—*On the Period of Lactation and its Connexion with subsequent Gestation.* By J. H. Shearman, M. D.

Every process in nature, has its assigned period, or space of time, in which it is performed. *Observation*, shows us that the sun which lights us revolves on its axis in a certain number of our days, and that a series of planets, of which our own world is one, revolve around it, in certain definite, but differing spaces of time. *Induction and deduction* assist us to the conclusion, that all the stars of heaven are either suns or planets, and that they all move on their axes and in their orbits, in definite periods of time.

All the phenomena of our world are periodic. The seasons, day and night, the weather, the formation and production of the three great kingdoms of nature—the mineral, vegetable, and animal, are all periodic. Some of the most apparently casual and incalculable occurrences have been shown to be subject to the law of periodicity; as the return of comets, a succession of hot or cold years, abundant or defective harvests, the recurrence of epidemics, the revolutions of empires and opinions, and the rise and progress of discoveries. Indeed the whole universe must be subject to laws of time and place, and therefore of periodicity, or how could there be any plan, progression, or development? How could there be prophecy, prediction and fulfilment?

From this aeronautic survey of the periodic constitution of the universe, we descend to the apparently insignificant, but in reality important consideration, of the periodic laws of woman.

She commences her career as a puling and unobservant babe, and progresses through the conditions of infancy, childhood, adolescence, and puberty to maturity; when she becomes a reproducer of her race, a former and a moulder of society. Nine months she was *in utero*, while being formed from a mere speck scarce visible, into a full grown and a full formed child. For nine months more she draws her sustenance from her mother's breasts, ere she had teeth enough to masticate her food herself. Seven years she spent acquiring muscular and osseous strength enough to walk, to run, to leap, and dance, and intellectual and moral power enough—to know, to reason, and to feel. Seven more she spends, without the consciousness of sex, in gathering thought and feeling, and then seven more she spends in her development as woman, and she is complete, a reproducer and an educator of her race.

When she commences the distinctive portion of her life, her period of womanhood, she has a monthly flow of a peculiar fluid from her uterus, and this continues, if she be not pregnant or disordered, for twenty years or more, a monthly preservation of, and preparation for, the mystery and felicity of her being—the process of gestation.

If wedded love and happy impregnation be her lot, every two years of her productive period, she adds another human being to the race, and furnishes the commonwealth with muscle, mind and morals, preserves her own life by the due performance of her functions, and gives her husband happiness and health, and lengthens out his life.

The period of lactation, as appointed by the laws of unobstructed and propitious marriage, is about nine months. Then is the woman fit again for the performance of gestation; and the milk ceases to flow, or it is of little value to the child. Gestation may commence again as early as the seventh, or not until the twelfth month of lactation, but the average period is the ninth.

The reasons why a woman occupies the period of nine months, in the two processes of utero-gestation and lactation, must be sought for in the constitution of the world in which she lives, and in the nature and design of that peculiar race of beings, which she thus produces and supports. The world which she inhabits, though immense, compared with the small space which she requires, living or dead, is yet a bounded space; and does not furnish sustenance quite so gratuitously as at first sight we might suppose. Some space and time are requisitely interposed between each human advent, or there would be nothing for the race, but a mere mass of misery and death.

The geological phenomena which are presented to us, teach us, that each condition of our globe, which has fulfilled its part in the great act of planetary destiny, is yet subservient to the greater drama of the destiny of solar stellaries; and must have been performed in periodic times, in order to accord with all the greater movements and performance of the vast whole.

The earth, on which we are performing our apportioned task, is now accomplishing its most important cycle. The race of man, the highest habitant, that yet has graced its surface, like other races with an animal nature, is not eternally to reproduce. There is a limit, within which the last gestation and lactation, must be finally accomplished. The last scene of the last act of the grand drama of the human race will be performed and the catastrophe of all the nations, tribes, and individuals will appear.

The generation and gestation, birth, lactation, education, and formation of the race, must all depend upon, be subject to, the greater movements of the mechanism of the heavens.

The present cycle of the earth must be performed within a certain space of time. The whole of the arrangements and productions of the earth, are for the ministry of good to man. The number and condition of the race, must be a definite arrangement, or nothing could be carried out by them, or known of them. The definite condition of the race, being given, the definite condition of each one must be admitted. The greater law includes the less. Hence every human advent, is accomplished by the combinated laws of the great universe.

Though man appears upon the earth but as an animal, he has a spiritual nature; and as he progesses in his being, the wonderful disparity between himself and other animals, becomes most manifest. This spiritual nature has its laws of progress and development, and being of a higher nature than the animal, subjects the lower, necessarily, to its requirements. This spiritual nature has for its companion and domestic, the intelligent nature, which requires a long and careful training. These are a few of the great series of the code of laws which regulate the periodic movements and phenomena of our bodies, especially of those of woman.

The body of a human being is designed to last for seventy years or more. It is a principle of nature well known to artisans and machinists, that an article of manufacture, or a machine, which is designed to last for a long period, must be composed of finer particles, and have more labor spent upon it, than will be required for one which is to last a shorter time. Upon this principle, the body of a human being necessarily must be slow in its formation and its growth.

The uterus when first impregnated, is not larger than an ordinary pear, nor capable of containing half an ounce of fluid. At the termination of its pregnancy, it contains a child weighing eight or nine pounds, a placenta and its membranes weighing a pound or more, and two or three pints, or even quarts, of liquor amnii. The increase of the uterus, is much more extraordinary as a phenomenon, than the increase of the fœtus, but both of them must be limited, or the death of the woman would ensue. What are the laws and causes of the limitation of this increase?

At first, the uterus is merely wanted as a bag or bladder, to contain the ovum, with its membranes and its fluids. The muscular structure, therefore, is of a very slight and feeble texture, and scarcely manifests the proper quality of muscle—contraction and dilation. The ovum is a quiet substance, requiring nothing more than a safe place for preservation, and therefore is sufficiently protected and provided for, by a membranous sac.

In time, however, the fœtus is developed, and as its muscularity increases with its size, and as the pressure on the sac in which it is contained increases, resistance to its pressure and its movements, becomes a requisite provision for the preservation and well-being of itself and mother. The uterus, from the necessity of the case, becomes increasingly a muscular organ, and as it grows in size, the muscular tissue is augmented, to resist the pressure and the movements of the fœtus.

If these two processes and powers progress in equal ratio, their limitation must depend upon some third condition or provision. This is discovered in the final conformation of the woman. Her form admits of but a certain definite amount of size and action of the uterus; when that is passed, resistance from the superior and primary organization—the mother—overpowers the secondary and inferior—that of the uterus—and that in turn, compels the tertiary—the fœtus—to submit.

The fœtus grows, becomes more muscular and active, and the uterus expands and strengthens, to contain, and to resist, the growing augmentation and activity of the fœtus. At length, encroachments on the mother's life are made, and now the energy of the mother, through the medium of the uterus, is employed in order to dislodge the burden that oppresses her.

The muscles of the abdomen and dorsum, the thorax, and the pelvis, and the lumbi, all conspire and all coöperate to force the intruder from his hitherto most welcome sanctuary.

The uterus being weakest at the aperture, must offer least resistance there, and consequently will give way to the contractile force of the superior muscles, and the efforts of the fœtus for its liberty. At length the forces of the mother and the child are all combined and concentrated on the act of utromission, and the child is born.

The human offspring is the most dependent on the mother of any offspring of the animal kingdom. During the period of lactation it is absolutely helpless, and would perish, but for the protection and provision of the mother. It has no teeth to masticate its food, could it be obtained; but as it does not gain the power and property of locomotion until it has attained its second year, there is a physical impossibility of sustaining its existence, were it left alone. The mother's time, attention, feeling, happiness and interest, are all required and well laid out upon her infant. No capital and skill and labor are so well employed, by any one, as by the mother. Every investment yields a rich and fruitful profiting return.

Now, if a woman could recommence gestation as soon as parturition was accomplished, she would be unable to fulfil her duty to, or feel the pleasure of, her offspring. The process of lactation would be seriously interfered with, or entirely superseded; and the care and tendance of her offspring, instead of being, as it is, the highest pleasure of her nature, would become a burden most intolerable to her. The period of lactation, therefore, is determined morally and physically, by the lapse of time which is required before another impregnation can be properly effected. That appears to be, from all the circumstances of the case, from seven to twelve months—or an average of nine.

In every natural process of gestation, a woman's health and whole condition are improved; because, in order to sustain her parasitic offspring, she must assimilate more food, and therefore make more blood, which gives a fulness to her person, and an energy to her functions, which she has not in the unimpregnated condition. So, in the process of lactation, a woman keeps up her improved condition, and is the healthier and happier for nourishing her offspring.

All functions that are intermittent or occasional, are provided with an organization fitted for their particular office. The mouth, in man, is not adapted to continual mastication; and when it is perverted to so foreign, low, and base a purpose, as the chewing of tobacco, how soon the symmetry and beauteous adaptation of the organ are impaired. The bowels and the rectum were not meant for frequent peristaltic motion, and when that function is performed too frequently, the organization being unfitted for it, suffers exceedingly, and soon becomes most fearfully deranged.

Now, both gestation and lactation are intended to be no more than occasional performances. In order for gestation to commence, the uterus must have the conformation suited for the passage of the semen, by capillary attraction and ascent. This cannot take place with the uterus in the condition which is requisite for carrying a full-grown fœtus. The uterus must, therefore, be contracted, and a great proportion of its substance be absorbed, after a parturition, before another impregnation can occur. Supposing we allow that in a few cases, impregnation has occurred within a month from parturition, they only prove how soon the process of re-preparation can be accomplished. Indeed, if we admit, what we are readily disposed to, that the processes of pregnancy and lactation may simultaneously proceed in a few cases, we are no more entitled to conclude that this is the design of woman's constitution, than that a woman was designed for bearing twins, or quadruplets, because she sometimes bears them.

The muscular fibres of the uterus have a peculiar organization. They augment in length, in breadth and thickness, and spread out in fasciculi in different directions. One series of them seems to be a counterbalance of the other, and thus they are prevented from contracting prematurely. Their organization is much more elaborate than that of commoner muscles. They nurture and accumulate their force for one grand display, and in that act exhaust their power, disorganize their substance. They must be repaired, if not renewed, for future service. The old worn-out materials must be removed, and much repair accomplished ere the uterus can re-perform its function.

This operation can be very properly conducted while the next process to gestation—that of lactation—is carried on. The vigorous and plethoric state of the circulation would be injurious to the mother, had she no active occupation for her blood. The admirable function of lactation preserves her health and happiness, while it sustains her infant's life, and gives her time and opportunity as well as means for reparation of her reproducing organs.

The chemical constituents of the milk, require the very same materials from the blood that are employed in nourishing the fœtus in the uterus—nitrogenous and saline combinations. It cannot therefore be in harmony with the monogenous adaptation of woman that she should produce and nourish simultaneously.

How then is the period of lactation determined? In proportion as the child obtains the powers of respiration, locomotion and mastication, more solid food is requisite for its well being, and as it necessarily is in the midst of other food, its senses and its appetite increasingly become excited by the food, and finally demand it. The intensity of interest which the mother feels for the well-being of her offspring, turns her attention and her feelings to her function of lactation, so long as her infant depends upon her absolutely for support. This feeling, operating on that portion of the brain which supplies the mammæ, the caloric of the brain, in its galvanic state, excites the blood-vessels to nourish and supply the mammal glands, for their required service. They necessarily enlarge and multiply, and keep up a *pro hac vice* or abnormal circulation and supply.

If the intensity of interest for the infant be maintained, the milk will flow continuously, for a much longer period than the natural term. Hence mothers, who are widowed during their lactation, frequently lengthen out the process, to enjoy the comfort which they find in the dependance of their infants on their care and sustenance. Hence, also, when a woman dreads another impregnation, she may, by the withholding of her feeling and desire for impregnation, render the uterus incapable of its distinctive function—while by her wish to lengthen out the process of lactation, she accomplishes her object.

When marriage is as it should be, a spiritual chord, not a mere joyless and insipid unison; then, impregnation is the woman's highest aim and feeling, and lactation is but secondary. She gives her infant sustenance because she has gestated it; and while she looks with rich delight upon the sustentation, care and culture of her offspring, the process of creation and production is the one which fires her soul with the most intense delight and admiration. For a woman to be so anxious for impregnation as to neglect the sustentation of her offspring would be a departure from both the moral and the physical laws of her being; and therefore an insanity. Such a case of course is, of necessity, a very rare one. The mere desire of commerce with the male sex, must not be confounded with the aspiration after offspring. Every true wife appreciates the difference, and every true husband who possesses such a wife can estimate her feelings, though he cannot have them.

We see then that there are both physical and moral barriers to the processes of lactation and gestation being simultaneous. If it were possible for woman to perform these processes together, she would be such a mere producing, nourishing machine, as to unfit her for the offices of wife and mother. It is a matter of the highest moment to a woman to be conscious of her duties and her interests, in order to attend to them; and therefore every increase of our knowledge of them is exceedingly desirable.

In order to sustain the process of lactation, a woman must assimilate more food than is required for her own sustenance, and this gives to the organs of digestion and assimilation, an activity and increase which invigorate and enlarge the body. Not only so, but there must be a greater quantity of food employed, in order to perform the process of lactation, than if the child were fed direct, as in gestation. The milk is a secretion, and in all secretions, there is a portion only of the blood employed. That portion of the blood from which the milk has been secerned, is now no longer fit for circulation, and must be re-assimilated before it can be used for any purpose of the animal economy.

By consequence, there must be an increased amount of the excretions, or there will be depositions in the caverns, sacs, and tissues of the body. Hence, often, women who have suckled frequently and long, become pinguidenous, and lose their comeliness, activity and health. The ingestive and assimilative processes exceed the formative, distributive and egestive ones, and serious depositions soon take place, impeding and obstructing many of the functions requisite for life and happiness. One of the sequences of long lactation is sterility. The ovaries become imbedded in a mass of fat, the fallopian tubes obstructed, and the uterus and vagina overlayed with adipose tissue, so as to be deprived of much of their contractile sensibility.

If lack of proper sustenance be one of the conditions of a lactating woman, she is less fitted to endure a long siege at the breast. The horrors which a woman may endure from pregnancy and suckling, when she is deprived of suitable and sufficient sustenance, are too shocking to dwell upon in such a paper as the present, but some notice must be taken of the injuries inflicted by the consequent absorption of the tissues and their interstitial substances.

It often happens that mere poverty is the great reason why a woman wishes to continue the function of lactation, for the express purpose of avoiding impregnation. Let her be shown that this is bad economy. Except she might destroy her offspring—the most abhorrent crime of human nature—she must support it. The most expensive process is that of suckling it. To feed the child direct is one third cheaper. The elements of food are then employed intact, not as in suckling, by election. The time, the means and the endurances of suckling, if laid out on some wholesome profitable labor, would, with the preservation of her health, support her child, and render both as comfortable as a woman and her offspring in such cases can be.

If she continue to perform the process of lactation after the natural term, under the disadvantages of poor and insufficient food, her organs will be decomposed, the particles essential to the sustentation of the infant will be used to help to form the milk, and she will undergo the process of disintegration and decay.

Her bones will have to furnish phosphate of lime; her brain will have to part with sulphur, phosphorus, chlorine, and alkalies and earths; her adipose tissue will be removed to keep her own lungs burning and to warm her offspring; and her blood will be deprived of most of its high nitrogenous and hydrogenous compounds. The elements of her animal organization will be so seriously interfered with, that loss of strength, ill health, bad spirits, and degraded views and feelings, will be the certain consequence. She neither will be fit for mother, wife nor nurse.

Nothing contributes more to health, in women who perform the processes of gestation and lactation, than a sufficiency of suitable labor. The lady, who, from her position, thinks she must not labor—the idle and the dissolute woman who has no moral motive to excite to labor—and the feeble who are incapable of labor—are in a poor and undesirable state of organization. The woman who from her necessities is obliged to work, and from her moral feelings labors cheerfully and thankfully, is better off than the most wealthy and refined, who eschew the health-inducing properties of labor.

The acts of walking, riding, dancing, travelling and gymnastizing are not substitutes for labor. As there is no other way to make a mother, but by impregnation, gestation and parturition, so there is no other way to be in health, except by the performance of some labor. As doing is a requisite to being, so well-doing is essential to well-being. The moral and the mental satisfaction which arise from the performance of some act are most essential elements of health.

The rule then for the period of lactation, we have found to be that which administers most happiness to all concerned. This is the principle of true direction in every case. Find out what this is, and we find the truth which we are seeking for. The period of suckling then is about nine months; which is the best both for the mother and the child, the father and society, and even the race at large.

Perhaps I passed too lightly over the continuance of the lactation for the purpose of avoiding impregnation. It is a vice of the same kind as onanism and abortion. The degradation of the latter are apparent, though by no means so appalling in the estimation of the perpetrators and society at large, as I regard them. The semen of the man, when rightly constituted, is an essential but concreted offspring of his triple nature—animal, mental, and spiritual. The only use of it which he can make, is to deposit it, in the appropriate manner, in the woman's womb. There is a pure and high gratification in doing this, if it be done according to the whole laws of his being.

If a man do not love the woman with whom he has the sexual commerce, the only gratification which he can experience, is that of being freed from an unpleasant fulness of his testes. This can be done without the proper use of woman's generative organs, or without the use of woman in any way at all. At all events, it can be done without depositing the semen in the womb. But of what value is such an act or process? The passage of the urine or the fæces is of essential consequence to health and life. It must come periodically, and be periodically discharged, if health and life are to continue. But this is not so with the semen. I never shall forget the loathed sense of degradation once expressed by a high-minded, suffering lady, who had a keen and vivid sense of what a marriage should be for a woman. She had been the victim of a husband of bad habits many years, but at length resolved to leave him. Drawing her graceful person up with dignity to her full height, she exclaimed, "I will not be a night-convenience to him any longer."

In abortion, after the woman has performed the highest act of a created being—that of receiving an emanation from another being, and uniting it with her own, until it has become a separate though united being, dependent on her for sustentation and support—she suddenly disrupts the ties of love and nature, and expels a part both of herself and of another with whom she has united—though all her organs and her constitution are constructed for the preservation and the nouriture of her parasitic offspring. The sexual commerce and the act of impregnation are not necessary to the life nor health of woman; but the preservation and the sustentation of her ovum are; and she who can deliberately force the ovum from her womb, in time would strangle her matured offspring, or desert it, if the temptation to the act were but presented opportunely.

I am too well aware the practice of abortion is become so fashionable, that to make even an allusion to it, will be very painful to a most important class of persons, very necessary to the profit and prosperity of the physician. I know they will not thank me, much less be likely to employ me, for expressing my opinions. I feel that I should say, in the just language of that character which, next to any known to be divine, I love to study:

> "Forgive me this my virtue—
> For in the fatness of these pursy times,
> Virtue itself, of vice must pardon beg,
> Yea, curb and woo, for leave to do him good."

If there be any practices which reduce the dignity of man, and majesty of woman, "to infamy and degradation, deep as lowest hell and dark damnation," those practices are onanism and abortion. The spiritual and the mental natures are dragged down into the most debasing cesspools of embruted and diabolized carnality. The man perverts a function which, when rightly used, lifts him up to the dignity of a creator—and yet he makes it a mere selfish, vile, abhorred, and loathed evacuation, without purpose, end or aim. Self-slaughter is the appropriate end of self-pollution. The woman, leaving her high station as developer and producer of intelligence and love, perverts her womb from an embowered shrine of beauty and of glory, into a cavern of dark death and pestilent putrefaction—the slaughter-house and grave of hatred-nursed humanity.

Once let a woman practise this foul crime, and farewell to her delicacy and her dignity. She has descended from the throne of wife and motherdom, and sat down on the stool of harlotry and whoredom. The sexual commerce, without the end or aim designed by our Creator, is a worse vice than any which afflicts or mars our nature.

N. B. In my last communication, (in the November number,) I made some observations on the medical knowledge of Shakspeare, in which I was afraid I stood so completely alone as to be almost ridiculously singular. I am happy to find that Dr. George Moore, the learned and ingenious author of "The Power of the Soul over the Body," has the following remarks:—"He (Shakspeare) was so observant of nature, and so well distinguished the apparent from the actual, that *his descriptions, even of disease, are so marvellously truthful, that the teacher of pathology may often quote them as the best guides to his pupils.*" This, to me, is a consoling sign of progression, and an encouragement to think, and write my thoughts.

ART. VI.—*Extracts from the Reports of the Proceedings of the New-York Pathological Society.* (Selected and prepared by Committee of Publication.)

[IN presenting to the profession the following report of the New-York Pathological Society, it has been thought best to commence with its early records, and in so doing the committee find that there are many valuable original memoirs which, from their intrinsic merit, deserve a place in the published reports. These memoirs will appear among the proceedings as fast as the space of this journal will admit. At the same time care will be taken not to exclude the reports of cases, specimens, etc., a goodly number of which will be continued in each report.—*Com. of Pub.*]

Remarks on Aneurisms of Aorta originating near the Heart.

By T. M. MARKOE, M. D.

I propose to call your attention this evening to some very brief considerations on that form of aneurism of the aorta which takes its origin at the very commencement of the artery in close proximity to the heart. Aneurisms originating in this situation, present some important differences in symptoms, progress and termination, from those arising in any other portion of the aorta, and it is more particularly in relation to their being the cause of sudden death, frequently without any premonitory symptoms, that I propose to consider them, and endeavor to explain the anatomical reasons of the peculiarities they present. My attention was first attracted to this subject by the following case.

Sarah Mason, aged 26, a mulatto prostitute, got up on Sunday morning before the rest of the people sleeping in the same room had left their beds. Those who noticed her get up, said she appeared perfectly well and made no complaint. She went down stairs and remained about 15 minutes, during which time she was seen by nobody. She then returned to her sleeping-room and laid down on the bed, still attracting no attention by any thing in her appearance or manner, and making no complaint. She had lain down but a few minutes when she was heard to struggle and gasp, like one suffocating, and almost before any one could get to her assistance, she was dead. On inquiring into her previous history, we found that though her profession had led her into exceedingly irregular and intemperate habits, she was considered a remarkably healthy person, and in particular had never complained of any symptoms of disease about the chest. On examining the body ten hours after death, the external appearances were those of remarkably good health; the body well developed and finely formed. No appearance of œdema about the ankles. As poison was suspected to have been swallowed, our attention was first directed to the stomach. That organ was found empty, very much contracted, and its coats unusually thick. The mucous membrane was wrinkled into large rugæ, generally injected with blood, and in some portions rather softer than natural. It was covered with an abundance of yellowish, frothy mucus. The intestinal canal presented no morbid appearance whatever. The liver was considerably enlarged, passing below the ribs and reaching into the right hypochondrium; its incised surface did not differ materially from one in a healthy state. On raising the sternum, the first thing that presented itself was the pericardium, forming an immense distended sac, pushing aside and covering the lungs; these latter organs being remarkably healthy, free from adhesions, and unusually free from blood. On opening this sac, six or eight ounces of clear yellow serum flowed out, and a clot of coagulated blood was found, in quantity at least eight ounces, closely enveloping the heart. The surface of the pericardium was healthy, and the heart of the natural size. On looking further, an aneurism was discovered springing from the under part of the arch of the aorta nearly opposite the origin of the arteria innominata. It was about the size of a goose-egg, and in the lower fourth of its extent involved that portion of the artery which is covered by the pericardium. On laying open the aorta it was found to be a false aneurism, communicating with the artery by an opening of the size of a sixpenny piece, with rounded and abrupt edges, at which edge the middle coat of artery appeared to cease. In the greater portion of its extent he walls of the aneurism were very thick and well protected by numerous layers of organized fibrin; in that part which was covered by pericardium there was scarcely any lymph deposited, and the walls at this part were, of course, quite thin. It was here that rupture had taken place, the inner membrane presenting a straight single laceration of nearly an inch, while the pericardium was only torn about one-third of that distance. The opening was unobstructed and communicated freely between the cavity of the aneurism and the pericardium. The other organs, as far as examined, were sound, excepting a small encysted tumor containing clear serum on one of the ovaria. The head was not opened.

On looking over the books, I find the termination of aneurism of the aorta by bursting into the pericardium is exceedingly rare. Dr. Hope makes this remark: "Rupture into pericardium is very rare. Laennec never met with an instance; and the first that has fallen under our obsertion occurred recently at St. George's Hospital." I find, however, in looking over the works of those who have more specially written on this subject, as Scarpa, Morgagni, Hodgson, and Guthrie, and some others, twelve cases in which the manner of death and pathological appearances are stated in detail. In every one of these cases the death was sudden; in ten of them it was instantaneous; in one, death took place in a quarter of an hour after the invasion of fatal symptoms; and in one life was prolonged nearly an hour. In nine of the cases some account is given of the previous history of the case; and what is very remarkable, of the nine thus stated, six had enjoyed perfect health, or at any rate, had presented no symptoms leading to suspicions of any thoracic disease. In all these six cases, where the patient had appeared to be in perfect health, the deaths were instantaneous. One woman, for instance, went to bed perfectly well, and in the act of copulation instantly expired. Another, whose case is detailed by Morgagni, was a weaver by trade, had gone to her loom apparently in perfect health. She was in the act of setting up a new piece of work, when she uttered a single exclamation and fell dead. Scarpa mentions a similar case of a young soldier, who fell dead while conversing with a companion; and, indeed, in all of the cases particular mention is made of the suddenness of the stroke of death. In the three cases which are stated to have suffered for some time before death with symptoms of their disease, only one died suddenly, the other two died, one in a quarter of an hour, and the other in an hour, and in each of these three very large aneurisms existed, or extensive disease of the coats of aorta, accounting very satisfactorily for the previous symptoms they had presented. In the six which had presented no symptoms before death, only one had an aneurism of considerable size, in all the others there were found either very small aneurisms existing near the heart, or a slight disease of the coats in the same situation without any enlargement. All the cases agree in this one circumstance, either the pericardium formed a portion of the wall of the aneurism, or the diseased artery was that portion covered by pericardium, and through this membrane rupture took place in all the cases, filling and distending its cavity with the effused blood, in quantity varying from a few ounces to several pounds. Now, taking these seven cases together, including the one related above, we have seven persons falling instantly dead from disease of the aorta near the heart, leading to rupture of that vessel into the pericardial sac. I do not wish to be understood to assert that sudden death is peculiar to such aneurisms, for all of us have probably seen such an event happen in aneurisms seated elsewhere, but I think we are warranted in stating that what is a rare and extraordinary circumstance in other aneurisms, is the most common occurrence in this particular form, and though instant death may not be rare in other aneurisms, yet instant death without any previous indication of disease, may, I think, be said to be of extremely rare occurrence.

In endeavoring to account for these circumstances, which appear to me quite peculiar to this form of disease, we must bear in mind the modes in which aneurismal, or other sacs exposed to distending forces, are ruptured. We may say that there are three ways in which this event is brought about. 1. By the process of absorption and true ulcerative perforation. 2. By inflammatory softening or actual mortification of tissues, inducing them to yield to pressure. 3. By simple laceration of healthy tissues. The first two modes of rupture, namely, ulceration or inflammatory softening, are altogether the most common, and the vast proportion of aneurisms that terminate by rupture at all, burst in one or the other of these ways. Thus the œsophagus, stomach, intestines, lungs, and the external surface, are almost invariably perforated, and it is exceedingly rare in any of these organs to find any thing like laceration, without previous inflammatory action having in some way affected the cohesion of the parts. The consequence of this previous inflammatory action is, that some local pain or disturbed function announces a certain time before death that the organ is suffering which is about to become the seat of perforation. Thus, in the stomach, such an event announces itself by nausea and vomiting, or perhaps only intense precordial anxiety, in the intestines severe colicky pains are frequently the only symptoms, while in the lungs more or less dyspnœa is usually present. Again, when the perforation has actually occurred, the death, though usually sudden, is by no means generally instantaneous, and this because the first openings are usually small and more or less obstructed by the products of the inflammation which nature has set up in the parts around. This is more particularly true of those aneurisms which burst into the substance of the lungs and those which burst on the external surface. When, however, tissues comparatively healthy give way to the force of distention, it is generally over a considerable extent the opening is free and unobstructed, and more resembles an incision made with a sharp instrument, as is noticed in specimen presented. This kind of rupture is found to take place most commonly in the serous cavity of the pericardium, the pleuræ, and the peritoneum. Let us look now for a moment at the anatomical peculiarities which in those aneurisms near the heart predispose to laceration. These are found in the fact that the aorta in its first portions is destitute of the third or cellular coat, and has its place supplied by the inelastic, inextensible serous lining of the pericardium, with a trifling amount of intervening cellular tissue. In all the rest of the course of this, as well as the smaller arteries, this cellular coat is found, and it is this covering which, yielding slowly after the inner coats are weakened or destroyed by disease, forms the sac of the aneurism. An aneurism may, therefore, be properly considered as a provision of nature to prevent death from the erosion of arteries, for were it not for this property of the cellular coat the cases of those persons who suffer from ætheromatous disease of the arteries would, I imagine, be very short indeed. When, now, the disease which is the cause of aneurism exists in this first portion of the aorta, we have the lining membrane and the fibrous coat destroyed, and we have remaining to resist the outward pressure, not the elastic loose cellular texture of the third coat easily taking on adhesive inflammation and strengthening itself by attaching itself to the neighboring organs, but the pericardial serous membrane, thin and unsupported by cellular tissue around, and in its own texture hard and unyielding. If under these circumstances the distending force within is very great, or if at any moment it becomes suddenly increased, laceration takes place and the pericardium is distended to its utmost capacity with blood. This explanation, drawn from the comparative inextensibility of the pericardium, is so natural and so satisfactory that all the authors who speak of this subject have adopted it. Mr. Guthrie, however, though he admits the fact that aneurisms in this situation rarely attain a considerable size without bursting, is not willing to admit the explanation given above. He gives an account of a specimen in Hunter's museum, which he himself says is unique, in which an immense aneurismal dilatation of the aorta existed, commencing at its junction with the heart and including the portion of the artery covered by pericardium and extending far along the arch. Reasoning from this specimen that the pericardium is distensible, he rejects our explanation, and refers the early rupture of these aneurisms to a difference in the nature of the original disease of the coats, without stating precisely in what he considers that difference to consist. That the pericardium in common with other serous membranes is, to a certain extent, extensible, cannot be doubted, but I think it is also quite clear that it does not possess the quality of yielding in a limited space to the same degree that loose cellular tissue does; the evidence drawn from post-mortem examinations goes to show that the pericardium in this situation actually does not yield to distention; and lastly, by his own admission, the specimen in which he has found this distention to take place, is so rare as to be a pathological curiosity. Without occupying any more time on this point, I will merely state, that there is in the New-York Hospital museum a specimen almost exactly similar to the one described by Mr. Guthrie. In this specimen there is an enormous dilatation of the aorta from the heart onwards, and this specimen at first sight seems to prove Mr. Guthrie's views, but on a closer inspection it rather favors the contrary opinion, for the pericardial portion of the aorta, though it has yielded to a certain extent, has by no means kept pace with the enormous distention of the other tissues; indeed, I do not think it has yielded much more than in the specimen of small aneurism I have presented, which seems to show, as far as one case will go, that its tendency is rather to resist than to yield to distending forces. To return now to the progress of the cases under consideration, when the sac gives way, of course the sac of the pericardium is instantly distended to its utmost with blood. The quantity which this fibrous sac will contain varies from twelve to perhaps thirty-six ounces, making a rough estimate from the published cases. Though this amount would be insufficient to destroy life if gradually drawn from a vein in the arm, yet the rapid abstraction of so considerable a quantity of arterial blood almost directly from the left ventricle is abundantly sufficient instantly to paralyze the heart's action, and I doubt not that such paralysis is in these cases the immediate cause of death. Some rare instances are spoken of, in which, either from extraordinary tenacity of life, or more probably from the slowness with which the blood escaped, life has been prolonged for a certain time after rupture of the aorta into the pericardium. Such a case of the pericardium becoming an aneurismal sac in itself, I have not found given in detail, though one or two authors mention the possibility of its occurrence. In regard to the amount of the distending force in an aneurism such as the one presented, it is exceedingly difficult to form an accurate calculation, but from such as I have made I am disposed to think that it is much greater than is commonly imagined. The calculations of the force of the heart's action are exceedingly discordant, and therefore doubtful. If, however, we take the most moderate and those founded on the most reasonable experiments, those of Hales, we shall consider its force to be about 40 pounds on each square inch of the aorta. Now, if we suppose an aneurism to have an orifice of half an *inch square*, the pressure on that orifice will be of course ten pounds. Let this aneurism have an internal superficial extent of four inches square, and on the principle in hydrostatics that fluids transmit pressure equally in all directions, we find that the sum of the distending forces within will be equal to 640 lbs. To show the considerable discrepancy, however, which exists among writers, I may state that if we take Boulli's estimate of the force of the heart as the true one, we shall find by using the same calculations as above, that the pressure on the aneurismal walls would amount to 3,155,000 lbs., which is equivalent to 1,577½ tons. On the other hand, if we adopt Keill's estimate of the heart's force, the aneurism will only have to resist the exceedingly moderate pressure of 138 ounces. Thus far in regard to the suddenness of the termination of these cases, and its explanation. The fact that these cases are announced by no previous symptoms will, after what has been said, suggest its own explanation, viz., that these tumors rarely attain a size sufficient to give rise to suspicious symptoms before they burst, their first, last, and only symptom may therefore be truly said to be the instantaneous death of the patient. —*July*, 1844.

Adhesion of Lips of Os Uteri and Abscess of the Cervix, from Injury by Instruments during Labor.

By James Crane, M. D.

Mary Graham, aged 32 years applied at the Northern Dispensary, (July 20, 1843,) for relief from leucorrhœa. She has had one child, which was delivered by instruments, five years since. Says, "she has not enjoyed good health since that time." Complains of a constant pain in the bottom of her belly, which is relieved by taking the recumbent posture. Also pain in the back. Menstruates regularly every month. Has no show of any account. The catamenial discharge is not continual, but comes and goes. Is suffering under its effects for three days, but the actual loss of blood lasts only for a few hours, during which time she changes only a single napkin. Her monthly periods are ushered in with attacks of sick headache. Suffers from leucorrhœa between menstrual periods.

Touch By the touch the neck is found to be irregular and nodulated. A distinct, circumscribed hardness, of the size of a common bullet, is discovered above the lip on the posterior wall, extending towards the body of the uterus, which is not enlarged.

Speculum. To the eye the neck looked small, pointed, knobbed, and of a pale rose-color, with the exception of a small nodule on the edge of the os, which was of a bluish color. There was no trace of the lips. The os was found with difficulty, and was a mere circular pin-hole, scarcely admitting the thinnest end of a probe. Through it was oozing a dark, viscid, bloody drop of fluid.

July 26th. Passed the blunt end of a small steel bougie into the os with difficulty. Through it was oozing a little blood, mixed with mucus. The os appeared to be obliterated by adhesion of lips, except at this minute central aperture, and from its edge extends a bluish line which is evidently a cicatrix.

August 4th. Patient has suffered from excessive pain in the back since her last visit. Has a good deal of irritation about the bladder. Cannot sit down to pass water. Yesterday was seized with colicky pain and a chill, which was followed by fever and sweating. The first and only weed.

Speculum. Immediately upon introducing the speculum, discovered pure pus, mixed with blood, issuing from the os, of an excessively fœtid character. By pressing the instrument against the os it escaped in a large quantity—one ounce at least. Coughing increases the discharge. A small bougie was now passed into the cavity of the uterus, and its withdrawal was followed by an excessive gush of matter. After this discharge the cervix is found to be excessively flabby. The upper lip is pale and smaller than the lower, which is more livid.

By actual touch the uterus feels enlarged. Anteriorly, towards the left side and behind the pubis, some hardness and fulness is discovered. The circumscribed hardness of neck has disappeared. The uterus is not enlarged above the pubis, nor is there any abdominal disease.

August 15th. Has had a good deal of pain in the bottom of the belly for a day or two. There is slight discharge on linen. Appetite good. Urine high-colored, and some pain about the meatus before passing it. Menses have not appeared, although they ought to have done so.

Speculum. The lividity and flaccidity of the neck continue. Pus of the best kind escapes in small quantity. The os is a mere pin-hole, and admits with difficulty a conical bougie, No. 2, at point. When the bougie is introduced it is firmly held, and the neck can be drawn forwards and backwards by it, like a flaccid bag. The size of the neck is diminished one half, and it seems to be but a mere sac.

August 21st. Patient has menstruated for some days, and much more copiously than for five years past. Is now sick.

Speculum. There is no pus passing through the os, but thick, black, bloody mucus in small quantity. Flexible bougie No. 3, (conical,) passes $1\frac{1}{4}$ inches and strikes against a fleshy base. No. 5 passes the same distance, but is strongly grasped on extraction. No. 7 cannot be passed. The appearance of the neck is the same. The os is more dilated. There was no pain in menstruation.

August 30th. Has a greenish discharge and a feeling of weakness in the region of the uterus.

Speculum. Thick pus is again flowing from the os in abundance. Bougies Nos. 7 and 10 were easily passed into the cavity of the uterus, and followed by the application of nit. argent within the os and upon the neck externally.

The woman did not return again.

Case of Inflammation of the Portal Vein.

By Israel Moses, M. D.

Mrs. ——, aged 32, of temperate habits, after a fit of passion in May last, became jaundiced; in twenty-four hours afterward she was attacked with fever which continued till within a fortnight of her admission into hospital. At this time she was emaciating, had œdema of the feet and ascites, and the superficial veins were very prominent. She had been out visiting the previous night, and while out was attacked with delirium. When brought into hospital she was in a collapsed condition. She was in hospital three days. She was delirious during the first forty-eight hours, the last twenty-four calm but somewhat irrational. The skin was icterode. She had vomiting, diarrhœa, dark green evacuations, also bloody, from hæmorrhoids. From these she had also much hemorrhage before her admission. P. M. The liver not much enlarged, the spleen decidedly so. There were old coatings of lymph upon the peritoneal surface of each. The internal structure of the liver was coarse and granular, very yellow and mottled with ochre-colored spots. The minutest ramifications of the portal vein were burdened, thickened and filled with a fibrinous mass, or in other words, obliterated by fibrine. There was a large effusion in the right pleural cavity and in the abdomen, and the surface of the intestines was covered with a thin layer of old lymph. In the large branches of the vein the coagulum was adherent to the inside of the vessel and made one substance with its coats.—*Nov.* 6, 1845.

Case of Spina Bifida terminating in Rupture of the Tumor.—Death three days afterward.

By A. G. Elliot, M. D.

Dr. Elliot presented the cadaver of a child who had spina bifida, and which died on the 12th day. At birth the tumor was small but rapidly increased. Sac ruptured on the ninth day and it lived three days afterwards. Hydrocephalus existed and the bones of the head were more separated than at birth. It had fever and refused to nurse. The three lower dorsal vertebra and first lumbar were bifid; the sacrum not involved. Dr. Elliot supposed the child to have died of exhaustion from the great discharge of pus from the wound. Very slight convulsions occurred for forty-eight hours before death, and occasional slight twitchings of the hands and face. After the first four days it had paralysis of the lower extremities, but had till death control over the bladder and rectum. When born the upper part of the tumor was translucent. The rupture took place on the lower and opaque portion. After death, on compressing the head, pus escaped from the upper part of the tumor.—*Dec.* 24, 1845.

Case of Extra-Uterine Pregnancy.

By Prof. R. Watts, M. D.

Dr. Watts exhibited a vial containing the debris of an extra-uterine fœtus extracted by Dr. Stevens from the abdomen of a female, where it had remained for nine years. It was her only pregnancy. After having gone her full term, labor pains occurred but passed off without delivery, and she remained in good health up to 1839, when she had an attack of constipation, which was relieved by the introduction of the long tube; she then continued well up to six weeks ago, when she was attacked with a discharge of purulent matter from the rectum attended with hectic fever and prostration. Extra-uterine pregnancy was then diagnosticated and the operation performed; the pregnancy was supposed to be tubal. A rather small opening was made in the linea semilunaris; the bones of the head separated and removed piecemeal, while the body was removed entire; a portion of the soft parts separated. The operation was performed on the preceding Saturday and patient has been doing well since.—*Feb.* 11, 1846.

Case of Scirrhus of the Uterus.

By Prof. A. Clark, M. D.

Dr. Clark presented a uterus from a woman, aged 46 years, which was entirely scirrhous; the whole body was a stony mass, the neck sunken and the ovaria both scirrhous. A cyst existed, containing clear fluid, formed in the ovary itself. On its surface were a number of pearly, opaque, glistening white bodies. The tubes were carried backwards and were adherent. There had been no symptoms of uterine difficulty.

The interest of the case lay, he said, less in the specimen than in the case itself. The patient had come to the clinique of the college, and had been attended at her home by a physician from thence. She had uneasiness of the abdomen, vomiting, and emaciation. A tumor existed in the abdomen, oblique from the right side of the spine and downward to the umbilicus. Firm pressure caused it to recede, and produced no pain. No opinion was expressed as to its nature, either by himself or Dr. Gilman, who had seen the patient. The pyloric orifice of the stomach was cancerous, and very much contracted. The disease disappeared in the middle of the stomach—the intestine beyond was healthy. There were no very well marked symptoms of scirrhus of the stomach. She had vomiting or gulping of bilious matter, scalding but not acid. She did not die of either scirrhus, for no ulceration existed, but of symptoms of chest disease. Three of her family had died of consumption. She had cough and hæmoptysis, and he had diagnozed tubercles, which were not examined post mortem. Her expectoration was copious and tenacious. She died of suffocation from secretion into the bronchi, and there was no doubt, from the physical signs, that the case was one of tubercle (of the lung) and not cancer. The scirrhus of the uterus had not commenced at the neck, for it was less affected, if any thing, than any other part.—*Feb.* 26, 1846.

Case of Carcinoma of the Stomach.

By Prof. W. Parker, M. D.

Dr. Parker exhibited a specimen of carcinoma of the stomach. The patient was a lady, 43 years old, married. Had been indisposed twelve years; the first attack dating from the sudden death of her son. She had pain in the abdomen generally. Five years ago a tumor was discovered, which was then supposed to be ovarian. Dr. Parker saw her first a year ago. She had none of the usual characteristic signs of cancer, as vomiting, pain, burning, etc. When last seen by Dr. P. there was a tumor on the left side, opposite the umbilicus, which was moveable, and cancer was diagnozed. Last summer she had severe dysentery, since which she has ate and drank well, and the bowels were free. Nevertheless, she emaciated and was œdematous and had enlarged lymphatic glands on one side of the neck. At times, strings of inspissated mucus (tubular) two or three feet long, passed the bowels. On a post-mortem examination, the disease occupied the whole pyloric orifice of the stomach, encroaching both on the duodenum and stomach, in extent about three inches square. The tumor was in a state of open ulceration. The other parts of the stomach were healthy. The external ganglia were enlarged and cancerous—one, the size of a walnut, was encysted. No other disease existed than a small perforating ulcer in the centre of the stomach. The patient died of emaciation from imperfect nutrition.—*April* 8, 1846.

Case of Calculus in the Bladder—Death from Exhaustion.

By W. H. Van Buren, M. D.

Dr. Van Buren related the particulars of the case of an old gentleman, of 72, who was attacked, five years ago, with retention of urine, of which he had frequent repetitions. He labored under calculus, which gave no trouble and of which no rational signs except frequent micturition existed. Finally, he had an attack of vomiting for 72 hours in succession, which nothing allayed, and he gradually sunk and died from serous effusion into the brain, with diseased heart and exhaustion.

The omentum adhered to the ilium and ascending colon. Recent grumous blood and pus escaped on raising it. The appendix vermiformis was ulcerated at three different points, and attached to the ilium. In the colon, two inches from the valve, was an ulcer $\frac{3}{4}$ of an inch in diameter, and a smaller one within it. Old false membrane on the inner surface of the colon. The mucous membrane of the bladder thickened. All the lobes of the prostate immensely enlarged. The peritoneal covering of the bladder very fat. A sacculus behind third lobe. Something very hard felt in third lobe of prostate. The prostate, posterior of the urethra, was not diminished in calibre. The ureter was very much dilated and the inferior infandibula very much enlarged. Pelvis of kidneys not. Substance of the kidneys partially absorbed.—*June* 24, 1846.

Case of Atlectasis.

By A. Sabine, M. D.

I——, aged 15 months, has been in the Colored Home for nearly 12 months. Has always been a remarkably delicate infant with hurried respiration.

P. M. Child emaciated; abdomen large. Child's chest very narrow and contracted, (pigeon breasted.) Heart enlarged, but not otherwise examined. Lungs on both sides have a curious appearance. More than one half the lung on either side is non-aerated, while the other portions are slightly emphysematous. The lobes and lobules affected are of a violet reddish color, depressed and covered by healthy pleura. On cutting into these portions it resembles a compressed lung; is very tough, not granular, and exuding from it a bloody unaerated fluid. Liver very large. Kidneys; one atrophied and encysted, the other greatly hypertrophied.—*Sept.* 23, 1846.

PART SECOND.

CRITICAL ANALYSIS.

Art. VIII.—*Ueber den Sitz und die Natur des Grauen Staares.* Von Dr. G. Hoering. Heilbronn. 1844.

On the Seat and Nature of Cataract. By Dr. G. Hoering.

The ophthalmological literature of Germany is already greater than that of any other country, yet new works continue to swell the catalogue. The example of the eminent individuals who have conferred such honor on the German name, has doubtless contributed to direct the minds of their students to the cultivation of this branch of medical science; just as the auscultators of France have turned the attention of their followers to the diseases of the chest.

Hoering divides his subject into two parts. The first contains the pathology of the capsule, and the second that of the crystalline body.

In the capsule he recognises two layers. The external layer is composed of short white fibres crossing in all directions, and resembling other serous membranes, with the exception that the fibres of the serous lamina of the capsule are shorter, finer, and more compact. The inner layer of the capsule is composed of polygonal laminæ, each of which is provided with a nucleus, and resembles the epithelium of the mouth and vagina. From our own examinations we believe that the anterior capsule is composed of three laminæ, two of which invest the crystalline, and the third, or membrane of the aqueous humor, is reflected over their anterior convexity.

From the thinness of the capsule at the margin of the crystalline body, there arise two pathological conditions—separation of the capsules and indentation. In the former case, the portion corresponding to the margin is softened, and the connecting fibres are fragments of the lacerated capsule. Indentations or foldings of the capsule at the circumference of the crystalline occur when the latter is too small; the capsule, which is then too large, contracts at the circumference where it is thinnest—a condition which is frequently observed in tremulous cataract.

Capsulitis. The symptoms of capsulitis anterior are almost unobserved, except when its course is rapid. At the commencement there is a slight obscurity in the pupil, as if the posterior chamber were filled with smoke, which is attracted toward the centre, and almost always settles there; yet there are cases where this want of transparency remains at a distance from it, and leaves a small space opposite the pupil for the passage of light. The obscurity is at first equal throughout, but being afterwards condensed in definite points, it thereby gives a cloudy appearance to the capsule, which becomes a little swollen, and nearer to the iris than in the normal condition. If the disease be not actively treated at its first appearance, in consequence of the effusion of coagulable lymph, certain portions of the capsule become white and projecting, as may be easily seen by observing the pupil in profile. Among these effusions are seen, here and there, blood-vessels, the arrangement of which the author regards as accidental, but not as a constant symptom, as stated by Walter, who maintains that the vessels of the anterior capsule form a vascular circle, the vessels of which run in arches, as in the knee or palm of the hand, and proceed to the centre of the capsule, where they form groups. Should their connection at some points appear to be interrupted, the vessels are nevertheless united by fine filaments, invisible to the naked eye. From obscurity of the capsule, vision in capsulitis is always indistinct. The disease is sometimes complicated with inflammation of the iris, of the retina, or of the sclerotica, and among these, iritis is the most frequent.

Synechia Posterior. Our author contradicts the general opinion that inflammation merely of the iris, and effusion of coagulable lymph from its surface is sufficient to produce synechia posterior. When lymph is effused on a circumscribed spot of the peritoneum, we meet with albuminous matter more or less organized in form, but we never find adhesions, unless an opposite surface of the peritoneum be likewise inflamed, and lymph effused from both portions—the surfaces of the iris and the capsule must, consequently, be both inflamed before adhesion can be effected. Three cases are quoted where iritis and capsulitis coëxisted, and attempts are made to confirm his views by describing experiments on animals. We do not think, however, that the simultaneous inflammation of both surfaces, and the experiments related, alter the generally received opinion, that synechia posterior may, at least sometimes, be produced by inflammation of the iris alone. In a case where the cornea had become partially opaque after bursting, and the distorted pupil was completely filled with coagulable lymph, to all appearance binding the iris to the capsule, we operated for artificial pupil, and contrary to expectation the lymph followed the retracting iris, and left the lens quite transparent.

Capsular Cataract. Opacity of the capsule may be divided into three classes. 1. Opacity of the anterior capsule. 2. Opacity of the posterior capsule; and, 3. Opacity of the entire capsule. Of these the most frequent is anterior capsular cataract, which is subdivided into, *a*, congenital; *b*, traumatic; and *c*, those cataracts which arise from inflammation of the capsule.

a. Congenital C. C. This cataract may be very easily confounded with that which appears at the same period after birth with ophthalmia neonatorum, and it is almost always associated with other congenital diseases, either of the eye, or other portions of the body; such as fissure or total want of the iris; hydrophthalmia; micropthalmia; hydrocephalus; club foot, etc. The cases related show that scrofulous tubercles, sometimes rounded and sometimes of a pyramidal form, were deposited in or on the capsule. Opacity may also happen in another way. As in the early periods of fœtal life, the chambers of the eye are narrow, and the pupillary membrane touches the cornea on one side, and the capsule on the other, adhesion may occur between the membrane and the capsule. When some congenital cataracts have remained long in the eye, the lens is absorbed, and there is left behind only one membrane composed of the two capsules joined together. This species of opacity, called cataracta arida siliquata is very frequent.

b. Traumatic Anterior C. C. When we puncture the cornea of an animal, and introduce the instrument through the capsule to the external lamina of the lens, we observe as soon as the aqueous humor is removed, a pyramidal cloud the basis of which is directed to the capsule, and the apex to the wound of the cornea. If the wound of the capsule remain open, the substance of the lens presses between its margins and forms an elevation. In a few days there is no trace of the corneal wound, the pyramid becomes smaller and the wound of the capsule cicatrizes, leaving in its place a small spot which exists for some weeks. When the injury is more extensive, there are symptoms of inflammation of the membrane of the eye, and when examined, thickening of the capsule and effusion. The lens is always but little affected by wounds of the capsule alone, and it is very slowly obscured except in cases where the injury is violent. From numerous experiments on the vulnerability of the capsule, our author arrives at the following conclusions. 1. Wounds of the anterior capsules are very similar to wounds of the cornea; they have a tendency to heal by the first intention, but this is prevented by the substance of the lens pressing between their margins. When the wounds are made with a good cutting instrument, and the lens presents no obstacle, complete cicatrization follows. 2. In the nourishment of the crystalline, the anterior capsule performs a subordinate part. In this view, he agrees with Dieterich, who out of thirty-six cases of incised anterior capsule in rabbits, found obscurity of the crystalline in only a few of them. From experiments and from clinical cases where considerable injuries of the anterior capsule in man had very little influence on the transparency of the lens, it is inferred that the posterior capsule alone maintains the crystalline in its normal condition, and that the anterior capsule serves only to give exit to the superfluous fluid.

c. Anterior C. C. from Inflammation. Opacity of the anterior capsule may in this case be simple or complicated with adhesion; with separation of the pigmentum nigrum; with linear effusions; with staphlomatous enlargement; or with opacity of the lens. In appearance and distribution, capsular opacities vary as much as those of the lens. The capsule is sometimes scarcely obscured; in other cases the opaque spots are larger, more numerous or differently arranged. According to the form there are various definitions; as punctuated, arborescent, fenestrated, striped, &c. Some of the opaque spots may be compared to the pseudo-membranes found in serous cavities; and as in old cases, the latter are occasionally found tuberculated or ossified, the depositions on the capsule in cataracta trabecularis are either soft, almost cartilaginous, or even bony. By internal inflammation, the capsule may become thickened and enlarged like the cornea in staphyloma, and form what is called cataracta pyramidalis or staphyloma of the capsule.

Posterior C. C. The posterior capsule is transparent at all the periods of life, with the exception of advanced age, when an obscurity is observed at the margin of the lens, in the form of a whitish ring about half a line broad, and very similar to the arcus senilis of the cornea. The opacity is not situated on the capsule, but in its tissue, and it often encloses a thinner ring which is less distinct and nearer the axis of the eye. This circulus senilis is sometimes found in the anterior capsule, sometimes in the substance of the lens, but it most frequently appears in the posterior capsule, and always accompanies the arcus senilis of the cornea, to which it corresponds in position; beginning like it, at the upper or lower portion and thence extending till it forms a complete ring. Inflammation of the posterior capsule may exist and may be followed by opacity. Our author quotes two cases where opacity was found on dissection, and remarks that he had several times observed it in the living, when it appeared to injure vision more than opacity of the anterior capsule.

All authors who have observed irideremia agree, that it is always associated with cataract. Dr. Gescheidt of this city, ascribes the opacity of the posterior capsule, in those eyes in which the iris is defective, to efforts of nature to obviate the photophobia and myopia which characterize this defect.

Obscurity of the entire capsule. In this case the walls of the capsule approach each other, and form an opaque partition which prevents the passage of light to the bottom of the eye. This partition most frequently exists as a thin membrane, which continues unchanged during life, yet it is sometimes accompanied with other diseased products; as pus, coagulable lymph, disorganized fragments of the lens, &c., with which it forms adhesions more or less firm, or becomes altered in structure.

As other diseases of the crystalline body, and false membranes in the pupil have been called membranous cataract, the term has caused some confusion. Membranous cataract is defined as a change of the entire lenticular apparatus into one membrane, by collapsing of the opaque walls of the capsule, after more or less complete absorption of the lens. This cataract sometimes exhibits other characters; it becomes tremulous or swimming, which happens in the following way: when the lens is absorbed, and both capsules form one membranous layer, the latter shrivels and becomes smaller. When at this period, the pupil is expanded by belladonna, we observe a white yellowish membrane, more remote from the pupil than anterior capsular cataracts. This membrane is spread out as a veil by means of white filaments which adhere to the ciliary processes, and which disappear as the membrane contracts, till at last there remain but few to maintain the cataract suspended. The name of tremulous cataract is derived from the agitation of the membrane on every motion of the eye. Should the filaments which keep the obstruction suspended, be ruptured, the opaque capsule swims in the aqueous humor, and is called cataracta natalis, which sooner or later disappears from the pupil by sinking or absorption.

Membranous cataract is frequently congenital; it is sometimes the consequence of convulsions in children newly born, or at their first teething. The formation of the opacity is ascribed to spasmodic contraction of the muscles, producing laceration of the capsule, and subsequent absorption of the lens. This opinion is supported by cases of individuals more advanced in which this cataract was formed in consequence of the effect of strychnine. Dr. Cunier observes that this medicine and veratrine have occasioned such violent spasms, that the capsule was lacerated and the lens forced even into the anterior chamber.

[Dr. Tully, of New-Haven, was the first to observe that the eyes of a presbyope could be accommodated to the vision of near objects when under the influence of strychnine. By spasm of the ciliary muscles contracting the vascular circle and preventing a free return of blood to the vasa vorticosa, the ciliary processes become erected in an unusual manner and draw forward the anterior wall of the canal of Petit, which can be demonstrated to be a continuation of the capsule. As the capsule encloses the lens, the entire crystalline body approaches the cornea when the former advances and the eye is adjusted to the vision of objects which are near. When this forced condition of the adjusting apparatus is maintained, the circulation in the capsule is affected, and opacity may be the result. Too much power is generally ascribed to the diminutive artery of the vitreous humor, which in our opinion performs but a trifling part of the duties ascribed to it. The nutrition of both capsules, as well as of the greater part of the vitreous humor, the membranes of which radiate from the canal of Petit, is affected by vessels from the ciliary body. That powerful spasm of the external muscles may lacerate the capsule, is not denied, but the formation of cataract by compression of the vessels is a more rational explanation.]

The most frequently occurring membranous cataracts are indisputably those which are the result of depression of the lens. Among the unfavorable accidents which happen after this operation, they are fortunately the least to be feared.

Ossification and Lithification of the Capsule.—What is called ossification of the lenticular system may be divided into three classes; 1, into cases of the capsule alone; 2, into those of the capsule and lens; and 3, into those of the lens alone. As authors do not agree that the morbid formation is a real osseous metamorphosis, it is supposed that calculus of the tissue has been mistaken for genuine bony deposit.

True ossification occurs only in normal or accidental cartilages. It is most frequently observed in the cartilages of the larynx or ribs of aged individuals, yet it is sometimes met with in the cartilages which are accidentally formed in the muscles and membranes of the young. These products exhibit under the microscope the characteristics of true bony tissue, and when treated with hydrochloric acid leave a cartilaginous mass, analogous to that which we obtain from the bones of a skeleton.

Lithified tissue is very different from that which is ossified. Instead of the fibrous structure of bone, we observe under the microscope an irregular granular appearance. When calculous matter is treated with hydrochloric acid, a large quantity of gas is evolved, and the residuum is not cartilaginous, but a slimy sediment.

Calculous are more frequent than osseous changes; they apparently arise from fluid surcharged with calcareous matter which is precipitated in the meshes of the tissue, and the latter disappear in proportion to the accumulation. Under the microscope we recognise the primitive elements of the tissue, but instead of the usual constituents we find a calcareous mass. In a hardened nerve which was examined by Remak, the primitive nervous fibres, covered by neurilema as in the normal condition, were distinctly observed under the microscope. This morbid change appears to be affected in the same manner as the petrifaction of plants: it is found most frequently in the middle coat of the arteries, in the glands of Pacchioni, in the thyroid gland, and in the fibrous tumors of old people.

Cases of calculus, very similar to those related, consist merely of a deposit in the spaces of organs; as the concretions found between the retina and choroid. These irregular masses usually exhibit the print of the neighboring organs; sometimes they resemble bone; sometimes a calculous mass; and from the difference in appearance has probably originated the different opinions concerning their character and etiology.

SECOND DIVISION.—DISEASES OF THE CRYSTALLINE.

It is generally conceded that the crystalline lens consists of concentric laminæ, which are composed of fibres lying parallel to each other. Under the microscope these fibres appear as little bands, with two surfaces and two lateral margins. The outer surface is turned toward the capsule, the inner one towards the nucleus, and the lateral margins, which are the means of union to the neighboring bands, are usually smooth, but in lizards, frogs and certain fishes, they are toothed or dove-tailed in a manner somewhat resembling the sutures of the skull. [The discovery of toothed margins in the lenticular fibres of the cod, by Sir D. Brewster, led to the opinion that the fibres of the crystalline in all other animals were formed on the same model, but modern researches have shown that this is not the case.]

As there is some doubt about the existence of the liquor Morgagni, the following remarks of the author on this point are interesting.

Often repeated researches on this subject have convinced us that there is between the lens and the capsule a mucous lamina, which under the microscope presents an appearance different from that of the capsule and the lens. This lamina is composed of small globules which resemble the globules on mucous surfaces, but they are less numerous and contained in a fluid, the quantity of which varies. In recently-killed animals it is very small, whereas in those which have been some hours dead it is often considerable; we may consequently suppose that the fluid is increased after death by endosmosis of the capsule. Each globule is composed of four or five nuclei which lie more or less regularly near each other.

Softening of the Lens.—This affection is very frequent. Out of a hundred cataracts observed in Vienna, at the clinique of Professor Jager, etc., eighty-four belonged to this class.

In softening of the lens, the substance of the organ is changed to a yielding mass, which, in proportion to its more or less complete destruction, presents innumerable varieties.

Of softening there are three grand varieties, each of which contains a number of gradations. In the first the lens is changed to a soft disorganized mass, in which the fragments of the fibres may be still recognised by the microscope. In the second the lens is dissolved; and in the third are included those cases where the surface of the lens only is softened, but the nucleus is changed into a mass denser than in the natural condition.

It is generally believed that softening begins at the surface of the lens and gradually advances to the centre, but it appears there are exceptions to the rule, as cases of central softening are mentioned by Morgagni and Guepin. More exact observations are wanting to prove the reality of the latter statement.

Softening depends on disorganization of the elementary fibres, apparently produced by abnormal influence of the fluid of Morgagni. The fibres are broken in pieces, and are so separated from each other that they form a heterogeneous mass of fragments mixed in a fluid. The lens then loses its transparency, just as glass becomes opaque when pulverized.

As the lens becomes softened, it is sometimes divided into two or three fragments, by radiating fissures arising from separation of the fibres at their terminations. From these divisions proceed other fissures, which are occasioned by separation of the fibres from each other, and which give to the lens a stellated appearance. The transverse divisions of the fibres form another variety of fissure.

Fluid Cataract. This variety is distinguished from that just described, only by farther progress of the softening of the lens. Here, too, the disorganization begins at the surface of the organ, and ends with its entire solution. When this cataract commences, the fluid of Morgagni is perfectly clear, and its augmentation escapes the eye; but when the substance of the lens begins to dissolve, it becomes opaque, of a dirty whitish, greyish, yellowish, or greenish color, more or less resembling pus. As the solution progresses the lens diminishes at the circumference; it becomes opaque, and soon consists of a small hard nucleus, which swims in the opaque fluid, and is finally dissolved. As the mass arising from this solution of the lens sometimes resembles milk or pus, we have the terms of milky or purulent cataract. When fluid cataracts are completely formed, they are called cystic or vesicular, and the condition is recognised by a peculiar tremulousness of the capsule, which is communicated to this membrane by every motion of the eye, or of the head. By pressure of the enlarged lens, the iris is pressed forward and becomes convex. By bursting of the capsule or absorption of the fluid which it contains, a membranous cataract is formed.

When the fluid of Morgagni begins to affect the lens, there are separated from the latter whitish flakes, which swim in the fluid, and in proportion to their quantity render it opaque. If the number is not great they fall to the bottom of the capsule, and form an appearance similar to hypopium when the eye is in repose; but at the moment the head or the eye is moved, the flakes ascend and obscure the pupil. This condition occurs when the solution of the lens progresses slowly, and is but seldom witnessed. Most frequently there is observed through the pupil a dense veil, which prevents the solution of the lens from being observed.

Instead of simple liquefaction of the lens, we sometimes find a complete decomposition of its elements; we also sometimes find new formations, the most remarkable of which are two kinds of entozoa. Of these the dystoma, so well described by Dr. Gescheidt in his celebrated essay in Ammon's Journal, occurs more frequently than the other, which was discovered by Nordmann, and called by him "filaria oculi humanì."

When the mass, of which the soft or fluid cataract consists, remains long in the capsule it may be partially absorbed, and what remains be converted into an adhesive, cheesy substance, which often acquires considerable firmness, and adheres to the capsule.

The very disagreeable smell which certain cataracts diffuse after extraction, sufficiently proves an alteration in chemical composition.

Semi-hard Cataract. This cataract, which consists of a hardened nucleus and softened cortical lamina, presents numerous varieties, according to the prevalence of one or other of these conditions. It is called semihard when hardening prevails, and semi-soft when softening predominates, yet there are so many medium degrees that we can only distinguish them by observation, as it is impossible to define them all by expression.

Hard Cataract. In hard cataracts, with very few exceptions, the disease begins at the nucleus of the lens. When observed at the commencement, the lens is turbid at the centre but transparent at the circumference, and the obscurity gradually proceeds from the centre to the circumference as the disease advances. When completely formed, the lens is quite opaque, but the opacity is always greatest at the centre. When at its commencement we remove a hard cataract from the eye we see that it is yellow in the centre, but we cannot again discover the opacity we observed in the lens when still in the eye. This phenomenon may be explained by the difference of refraction within and without the eye. When the cataract is laid over a black ground, and carefully shaded so that the light may fall on it only from before, the opacity is again observed as previous to its removal. When hard cataract is still more advanced, the nucleus is yellower, yet it remains transparent; when completely formed the nucleus is orange-yellow and not altogether opaque.

Softening or hardening of the lens seldom occurs alone, but the conditions are usually united. When the crystalline lens is changed at the centre it is for the most part also disorganized at the surface, either at the same time or subsequently.

It has been already said that softening of the lens depends on the secretion of the fluid of Morgagni separated by endosmosis from the aqueous humor which may contain foreign ingredients, as coloring matter or calcareous salts. In this manner we may explain black, red, green, calculous or bony cataracts, and other dieased products for which we cannot otherwise account.

We have thus condensed into our own language Hoering's essay on the pathology of cataract, which evinces much experimental and literary research. It is much to be regretted that one so able did not complete the subject by explaining the treatment.

The cure of cataract without operation has been brought forward again and again. Tartar emetic ointment, blisters, ammoniacal paste and lotions, prussic acid, iodide of potassium, mercury, galvanism, etc., have been recommended in turns, but they have all failed to be of the least service in the hands of honorable practitioners.

Of the mechanical means for removing the obstruction to the passage of light, extraction offers many advantages, yet it cannot be denied that so severe an operation is unnecessary in a case of soft cataract, and that even in experienced hands it is liable to many unforeseen occurrences.

From the instructions for depression in some modern works, it would be difficult to arrive at correct statistical information on the comparative success of the two operations, as it would be unfair to contrast an operation well executed in one manner, with one improperly performed in another. In all operations by the needle, the operator should be more emphatically reminded of the relative anatomy of the parts than is general. He should be reminded that the membranes of the vitreous humor radiate from the ciliary body to the centre of the globe, consequently those at the lower portion of the eye pass upward and backward. These membranes in different subjects vary in density, and the fluid displaced from their cells by a dislocated lens, will, when regenerated, tend to force the latter upward and forward. Should the lens not resume its former position, the chances are that a portion of its circumference will press upon the iris or ciliary body, and give rise to inflammation of an excruciating character. The direction and consistence of these membranes may be so easily ascertained by freezing an eye which has been immersed for a day or two in alcohol to coagulate them, and cutting it across, that it is singular that correct delineations of the cells are not given in the works which even last year emanated from the press. Whosoever will study the arrangement of the hyaloid membranes will perceive the difficulty of maintaining the opaque body out of the axis of vision by the operation of reclination. The laceration of the posterior capsule before depression, as recommended by Professor Mackenzie, and the formation of a resting place for it by division of the lower hyaloid membranes, will increase the chances of success.

The sensitive nerves of the globe are almost all distributed on the iris and ciliary body, and these structures cannot be injured with impunity; yet it is astonishing what they will bear; as we sometimes see the lens by depression made to ride on them, perhaps after having been made to perform a somerset. An inexperienced operator may treat the iris as if it were not endowed with vitality, but a few unsuccessful operations, especially if he fall into the hands of the Philistines, will show him his error. After it is evident to all that total darkness may be expected, he is obliged, day after day, to bear with the agonies of the patient. The loss of the fee is in this case no consideration. His resolution must be put on the stretch when he arrives at the door, and there is no escape from the peevishness and frowns of the household which he knows will be repeated.

If the patient is in humble circumstances the surgeon may anticipate a parade of his failure at an infirmary or at the chambers of a quack.

In the plan for depression by puncturing the membranes with a lancet and removing the cataract from the axis of vision by a stilet, as recommended by Desmarres, and in that by opening the cornea and depressing with a button-shaped instrument as proposed by Tavignot; the dangers are so apparent that it is unnecessary to make any comment on the operation.

Unquestionably the safest mode of operating for a soft cataract is diviision through the cornea, provided the patient has perseverence enough, and we are careful neither to dislocate the lens nor to make too large an opening in the capsule. A fine sewing-needle will in most cases be the best instrument, but if the cataract possess considerable tenacity, a lance-pointed cataract-needle will be more effective. An instrument that will completely fill the puncture as it advances should be preferred, as we have seen an eye destroyed from the evacuation of the aqueous humor and consequent pressure of the lens on the iris by the chisel of Hey. From the length of time and the number of operations necessary to get rid of a hard cataract in this way, it is probable that the patience of both patient and surgeon would be exhausted before the obstruction would be removed. W. C. W.

ART. VIII.—*The Transactions of the American Medical Association, Instituted* 1847. Vol. I. Philadelphia: published by the Association. Pp. 403.

[It was intended that there should also appear in this number of the Journal analyses of the reports on "Practical Medicine," and "Medical Literature," contained in the above Transactions, but owing to the pressing engagements of the gentleman to whom the former was assigned, it is necessarily deferred for the present. Owing to the severe illness of the editor the review of the latter report was not finished in time for the printer. Both these reviews will appear in our next.—*Ed. N. Y. Jour. Med.*]

BY the Regulations of the American Medical Association the standing Committee on Surgery is required to "prepare an annual report on all the important improvements, in the management of surgical diseases, effected in America during the year." In the preparation of their first report, the document before us, the Committee have labored under the disadvantages incident to every novel enterprise, and especially the difficulty of eliciting from individuals in every quarter of our extensive territory such original data as would come legitimately within their scope. They justly regret that their "circular letter soliciting information, &c.," was not more generally honored, and express the hope, in which we cordially unite, that the Surgical Report of the Association may in future be made the repository of the improvements in, and practical results of, American surgery. There will be no lack of appropriate materials when the attention of the profession shall have been sufficiently excited to the object, and we opine that, in future reports, the Committee will experience more difficulty in selecting and condensing than in obtaining matter. The present report contains, nevertheless, a number of interesting facts and results, plainly and concisely stated, which we shall proceed to notice in detail, inasmuch as they are, most of them, not to be met with elsewhere. A large share of the attention of the Committee has been engrossed by the all-absorbing subject of "anæsthetic agents;" this topic will be more appropriately considered in a separate article.

The Committee recognise, with much justness, as evidence of sound and substantial progress in the *science* of surgery the increasing disposition to determine by statistical results the actual value of operative procedures, and different methods of treatment of surgical diseases. The application of statistics to medicine is one of the great features in our science of the present day, and this method of investigation, which promises such desirable results, can only be successfully pursued on a large scale, by means of an extensive organization such as that whose labors have thus commenced. The subjects of fractures and luxations, of amputations, of operations for stone, aneurism, cancer, hernia and cataract, are specified in the report as particularly worthy of statistical investigation, and in pursuit of the proposed plan, 407 cases of lithotomy are recorded, with their results, obtained from the practice of Prof. Dudley, of Transylvania University, from communications received from Drs. March, of Albany, Mettaner, of Virginia, John C. Warren, of Boston, Eve, of Georgia, and Mussey, of Cincinnati, and from a tabular statement including all the cases operated upon in the Pennsylvania Hospital since the foundation of that charity. Of these 407 cases, 22 were unsuccessful, making an average mortality of 5.02 per cent., a result which compares very favorably with that obtained by Mr. Crosse, of Norwich, whose tabular statements, comprising 704 cases, derived from the records of the Norfolk and Norwich hospital, shows a mortality of 13.21 per cent.

The death of one of their members, Dr. Randolph, of Philadelphia, so well known as a successful lithotritist, deprived the committee of an elaborate contribution on the crushing operation for stone.

The subject of the treatment of aneurism by compression is introduced by a resumé of the circumstances connected with its history and successful reïntroduction, and concluded by a detail of five cases of recent occurrence in our own country, furnished by the operators, for the report, which are well worthy of reproduction:

> These cases have been treated by Drs. Buck, Rodgers and Watson, of New-York, Knight, of New Haven, and Mütter of Philadelphia.
>
> The first case was one of femoral aneurism, in which pressure was fairly tried and did not succeed, and it became necessary at last to resort to the operation by ligature.
>
> The instance which occurred to Dr. Rodgers was that of a negro seaman, aged 47, who, two months before, observed a swelling in the popliteal region, which arose after a fall. The tumor was of the size of a duck's egg, and the symptoms of aneurism were well marked. He entered the New-York Hospital, and on the 15th of January, 1847, pressure was made upon the artery near the groin by means of an arterial compressor. This was continued till the 12th of February, but it being found impossible to affect the desired object with it, Dr. Rodgers substituted another, consisting essentially of a metallic plate placed upon the inner side of the thigh over the vessel, having three holes at short intervals through which screws passed, each having at one of their extremities a firm pad, and at the other a projection to which a key was adapted, by means of which pressure could be made upon the femoral artery at the different points. This metallic plate was secured over the artery by means of broad straps attached to a sliding plate of steel, secured in a metallic bar, applied longitudinally to the back of the limb.
>
> Soon after the adjustment of this instrument, it was ascertained that the patient loosened the screw in the absence of his attendant. He was now watched night and day for three days, by the end of which time all pulsation in the tumor was entirely arrested. The swelling gradually subsided to half its original size. The only inconvenience experienced by the patient was a numbness of the limb upon the first removal of the instrument, but this soon left him, and he was discharged cured on the 13th of April.
>
> The case of Dr. Watson was one of femoral aneurism, treated also at the New-York Hospital. The subject of it was an intemperate Irish woman, aged 38. The tumor, which was hard and painful to the touch, had existed for a month, and extended from the upper and inner third of the thigh to within a finger's breadth of the internal condyle of the femur, and at the point of its greatest

circumference, reached from the inner border of the rectus muscle to the middle of the outer side of the thigh.

At midday, on the 23d of September, 1847, pressure was made by means of two pads secured to circular straps over the artery, with counter compresses on the outer side of the thigh, the pressure produced being regulated by a screw which acted directly upon the pads over the vessel. The first compress was fastened over the artery just as it emerges from beneath Poupart's ligament, the second a short distance below it, and both were so arranged as partially to control the circulation in the tumor, the pressure being regulated by alternately tightening one compress and slackening the other, in order to prevent abrasion of the integument. On the 24th the patient was restless; on the 25th she complained greatly of cramp and pain in the leg, which was much swollen, to relieve which a roller was applied, and the limb elevated on a pillow.

By the 26th all pulsation had left the tumor The upper compress was now removed—sixty-eight hours having elapsed from its first application, and very slight pressure was kept up by means of the lower one. No return of pulsation followed the removal of the compress, and in an hour afterwards the lower pad was also taken away. The skin beneath the upper compress had become somewhat abraded by the pressure, which required the application of a poultice, and subsequently simple dressings for a few days.

On the 28th no pulsation could be detected in the tumor, or in the femoral artery below the point, upon which the upper pad had rested.

By the 28th of October the tumor had much diminished in size, and become softer.

On the 12th of November, nearly two months subsequent to the commencement of the treatment, she left the hospital well, the tumor still gradually becoming smaller. There was no pulsation to be detected in the anterior or posterior tibial arteries, or at any point below the giving off of the profunda, and the femoral artery itself below that point was felt like a solid cord beneath the integument.

The case furnished by Dr. Mütter, was that of a book-keeper, aged 41, whose general health was feeble, and who, six weeks previous to the 24th of September, 1847, had been seized with stiffness in the right ham, which was soon followed by a pulsating tumor of the size of a turkey's egg. After a few day's rest in the horizontal position, his treatment was commenced by applying a roller to the limb in order to prevent swelling, and the application of one of Charrière's compressors, with a small oval pad over the femoral vessel where it passes down to become popliteal, and another similar compressor with a larger pad over the artery at the upper third of the thigh. The limb was then placed upon an inclined plane. After remaining in this position for twelve hours, the lower compressor was tightened until all pulsation ceased in the tumor. The pain produced by this procedure was severe, and could only be borne at first for half an hour. When it became insupportable, the upper compressor was screwed down, and the pressure from the lower removed. The patient supported the pressure above for two hours without much difficulty; it then became annoying, and in order to relieve the suffering, the lower compressor was again tightened.

By thus alternating the points to which it was applied, the necessary amount of pressure was kept up without excoriation, or any other injurious consequence resulting, and from the peculiar construction of the instruments, and the previous application of the roller, the swelling of the limb was trifling. During the treatment, the diet of the patient was restricted, and digitalis was administered to him.

By the 12th day the tumor was reduced to about half its original size; had become solid, and was free from pulsation. Notwithstanding these circumstances, Dr. Mütter did not consider it safe to allow his patient to move about, or even to relax the treatment, but continued to pursue the same course, with slight modifications, for six weeks longer. At the expiration of this period, the tumor had nearly disappeared, the collateral circulation was fully established, and the disease radically cured.

Dr. Knight's case, which is peculiarly interesting, from the novel manner in which the pressure was made, and quickly effected a cure, was that of a mulatto man, aged 48, in whom a popliteal aneurism had existed for several months. The aneurismal tumor, which was well marked, filled up the whole popliteal space. The leg was very painful and œdematous. After the œdema was removed by rest, and other appropriate treatment, pressure on the artery, by means of the hoop tourniquet, the calliper-shaped instrument, the common tourniquet, guarding the limb against pressure of the strap by encasing it with thick sole-leather, and by a variety of other mechanical contrivances, was fairly tried. By whatever instrument, however, the pressure was made, and however carefully it was guarded, whether continued on one point only, or shifted from one part of the artery to another, the pain became in a short time so severe that it could not be endured. The pain complained of was not in the part pressed upon by the instruments, but was felt equally in the thigh and below the knee, and occurred whether the limb was left uncovered or was enveloped in a roller. It usually began in twenty-five or thirty minutes after the pressure was made, and became intolerable in fifteen or twenty minutes longer, and could be continued in no instance beyond one hour. These efforts were persisted in for eight or ten days, and as nothing had been gained at the end of that time, were abandoned. Before resorting, says Dr. Knight, to the ligature of the artery, I concluded, with the concurrence of his physician, Dr. Tyler, to try manual pressure upon the vessel. "To accomplish this, a sufficient number of assistants were procured from the members of the medical class, who cheerfully offered their services. They were divided into relays, two keeping up the pressure for five or six hours, relieving each other every hour or half hour, and these succeeded by two others. Sufficient pressure to arrest the pulsation in the tumor was found to be most easily made with the thumb or fingers, without a compress, upon the artery as it passes over the os pubis, and the direction given to the assistants was to keep up this amount of pressure as nearly continuously as possible." This treatment was commenced at 3 o'clock, P. M. No pain of consequence was produced by it for five or six hours, and then it was not severe, and was quieted by the eighth of a grain of morphia once or twice repeated. About eight hours after the pressure was applied, the temperature of the limb was diminished, and it appeared shrunken in size. Upon removing the pressure from the artery at 11 o'clock of the following day—twenty hours from the commencement of the treatment, the tumor was found to have diminished very little, if at all, and pulsated as strongly as before; but the tibial arteries could not be felt. The treatment was continued. Upon examining the parts the next morning, forty hours after the treatment was begun, the tumor was found to be nearly one-third less in size, firm and unyielding on pressure, and entirely without pulsation. All treatment was then discontinued. The femoral artery pulsated with its usual strength in the groin, and distinctly as far as its passage through the tendon of the adductor muscles. Between this point and the tumor it could not be felt. Several of the anastomozing arteries, especially one upon the inside of the limb, could be distinctly traced passing over the knee, pulsating strongly, and enlarged in size. From that time to the present—a period of more than four months—no change has taken place in the limb, except that the tumor has gradually diminished, so as now to be scarcely discoverable, and that the leg, which was at first cold and weak, has nearly regained its natural temperature and strength.

In connexion with the ligature of large arteries, the recent operation upon the primitive iliac, by Dr. Lyons, of England, is noticed as making the eighteenth instance in which this artery has been tied, of which eight have proved successful. The patient of Dr. Mott, of New-York, upon whom this operation was first successfully performed, in 1827, is still living. The result of the last case in which this artery was tied in this country—by Dr. Peace, at the Pennsylvania Hospital, in August, 1842—has been furnished to the committee by the operator. The tumor reäppeared fifteen months after the operation, the patient, meanwhile, having been occupied in a laborious employment, and enjoying good health. On his reädmission into the hospital, it was found to be "soft, fluctuating, and of the volume of a small orange, with the integuments covering it discolored. In a few days ulceration took place, and he died, after repeated hemorrhages." Pressure upon the aorta did not arrest the flow of blood.

A singularly interesting case of obliteration of the thoracic aorta, detailed by Dr. West, in the *Transactions* of the Philadelphia College of Physicians, for February, 1848, is noticed as affording additional evidence of the ability of the collateral vessels to carry on the circulation under these circumstances. The epigastric and internal mammary arteries were found to be as large as the internal iliacs, and the circulation above and below the aortic stricture was mainly carried on by their inosculation.

The remainder of the Report is occupied by an abstract of the facts contained in the answers to their circular letter, received by the committee. Dr. March, of Albany, has cured hydrocele radically, in a number of instances, by drawing off the fluid with a large-sized round trocar, and introducing through its canula a camel's-hair pencil dipped into a solution of iodide of potassium, with which the surface of the cavity is to be thoroughly painted.

Dr. Horner, of Philadelphia, finds that no injection is to be wholly relied upon in radically curing hydrocele, and prefers passing a few threads of silk through the tunica vaginalis from top to bottom, even where the cavity is injected, by which the serum is carried off as fast as secreted, and the sides of the cavity, remaining thus in contact, more readily adhere.

Dr. Brainard, of Chicago, has found a solution of ʒij. of alum, and ʒj. of sulphate of copper to a pint of water, useful as an injection into extensively suppurating cavities; and has also proved by trial that the injection of a solution of iodine into the cavity of a spina bifida is attended with but little danger, and may cure the disease.

Dr. John C. Warren, of Boston, has abandoned the ordinary treatment of fracture of the condyles of the os humeri, as calculated to induce loss of motion of the joint. He discards splints entirely, and after the early inflammation has subsided, commences and persists in the daily use of passive motion, employing etherization, in order to render the treatment bearable. By the aid of the ether "he has restored the motion of a considerable number of anchylozed elbows, and has successfully applied the same measures to other joints, particularly the shoulder and knee."

Dr. Mettauer, of Virginia, has reported to the committee two cases in which death followed ligature of the common carotid artery, from interference with the functions of the brain. Hemiplegia and other cerebral symptoms occurred. We regret that the details of these cases are not given in full, as there is no subject in connexion with the ligature of large arteries, on which authentic data are more to be desired. The results of the investigations of Mr. Crisp, in his recent work on the "*Diseases and Injuries of the Blood-vessels,*" (Lond., 1847,) do not coincide with those of Dr. Norman Chevers, as recorded in the London Med. Gaz., Oct. 1845, who first called the attention of the profession to this subject. The researches of Mr. Crisp lead him to conclude that injury to the brain is less to be apprehended than the opinions of Dr. Chevers would lead us to suppose. An interesting case recently occurred at Bellevue Hospital, in which a ligature was applied to the primitive carotid in the hope of retarding the growth of a very vascular encephaloid tumor of the nasal cavities. Partial coma with hemiplegia of the opposite side occurred within 48 hours after the operation, followed by death on the 4th day. The details of this case will be given in the proceedings of the New-York Pathological Society in a future number of this Journal.

The appendix to the report of the committee on Practical Medicine, contains an excellent practical paper by Dr. Gurdon Buck, jun., of New-York, on a novel surgical resource in the treatment of œdematous laryngitis, first employed by him in the New-York Hospital, in 1847. It appears from the researches of the author, that scarification of the engorged parts in œdematous inflammation of the larynx, from swallowing scalding water, was first proposed by Marshall Hall, in 1821, and afterwards, in 1823, by Lisfranc, in a paper on œdematous laryngitis, who cites six cases in which it was actually performed, five of which terminated successfully. Without any knowledge that the proposition of Marshall Hall had been actually reduced to practice, Dr. Buck had convinced himself of its utility, and on the occurrence of the disease during the typhus epidemic of the past year he carried it into execution, by means of instruments invented for the purpose, with the result of saving more than one life by the operation. The following case, selected from five reported in the paper, will convey an idea of the practice pursued.

Case IV. was a patient of Dr. Swett in medical ward No. 9, North House, New-York Hospital, named James Rourke, aged 27 years, born in Ireland. On Tuesday, February 28th, 1848, at 2½ o'clock, P. M., was suffering with well marked symptoms of œdematous laryngitis, that had supervened in the progress of typhus fever at about the end of the third week. An abundant petechial eruption, great prostration, subsultus tendinum, and extensive bronchitis had characterized the fever. A supporting and stimulating plan of treatment had been pursued, and a large blister had been applied over the chest within a day or two, for the relief of the bronchitis. Patient was also taking Stokes' expectorant. When seen, his breathing, especially during inspiration, was difficult and sonorous, and his voice hoarse.

There was some soreness of the throat with a copious expectoration of viscid mucus.

The velum and fauces were of a deep red color, clean and free from swelling or exudation upon their surface. With the finger, the edge of the epiglottis was felt thickened, swollen and pulpy, by Dr. Swett, as well as myself. The glosso-epiglottic frænum and pouches on either side were not swollen.

I scarified the edges of the glottis and the epiglottis, two or three times at a few moments' interval, which was followed by slight hemorrhage, and from which patient admitted that he felt some relief, though from the confused state of his intellect incident to the fever, his own testimony was considered doubtful.

Some difficulty was experienced in the operation from the involuntary closing of the jaws as if by a movement of subsultus, by which the left forefinger was compressed between the teeth. The instrument used was the curved knife. On the following day, patient was found to have passed the night comfortably and was no worse, the hoarseness and dyspnœa were about the same; no paroxysms of suffocation had as yet supervened. Stokes' expectorant and stimulants were continued.

Second day, 4 o'clock, P. M.—Patient is decidedly worse, dyspnœa very much increased, paroxysms of suffocation and choking have now supervened, and are excited by attempts to swallow and on falling asleep, during which the face and lips become livid. The pulse is 80, full and quick, the skin warm and dry, the tongue brown and dry, and the throat clogged with viscid mucus; the epiglottis is felt to be mùch more swollen. I repeated the scarification very freely, taking the precaution to insert a piece of wood between the molar teeth on the left side, to protect my finger. More hemorrhage followed the scarifications than in any previous operation. At least one ounce of florid blood was hawked up, mixed with mucus, and patient expressed himself very much relieved. After this there was no recurrence of paroxysms.

Third day.—The case is going on favorably, respiration is decidedly easier, the pulse is good and 80 per minute.

Fourth day.—The improvement continues, the tongue has become white and moist, and the temperature of the surface more moderate. The epiglottis has nearly resumed its natural condition. Stokes' expectorant has been continued and the blistered surface kept sore. In a few days after, the voice recovered its natural tone, and the patient began to leave his bed. He was discharged, March 30th, cured.

In case V., of a more aggravated character and farther advanced, the scarifications alone were not relied upon, but the additional chance of tracheotomy was given to the patient with the happiest result. The patient was able to respire naturally through the larynx on the second day after the operation, and on the third day the trachea tube was left out altogether. In less than a month he was discharged cured.

The instruments employed are a knife with a curved handle, similarly shaped to the whalebone and sponge used for the application of nitrate of silver to the larynx, and having an extremity like an ordinary gum-lancet, with its cutting edge at right-angles with the shaft; also a pair of "scissors, curved flatwise for snipping the edges of the epiglottis, and swollen pouches on its lingual surface." Much stress is laid upon the importance of an accurate diagnosis of the disease, and the swelling of the epiglottis, as ascertained by the touch, is insisted upon as a sign which is strictly pathognomonic, and one which does not appear to have been sufficiently appreciated. The condition of the morbid parts is illustrated by several colored plates. We shall conclude our notice of his paper, which is in every respect highly creditable to its author, by his description of the method of performing the operation.

The patient being seated on a chair, with his head thrown back, and supported by an assistant, he is directed to keep his mouth as wide open as possible; and if there be any difficulty in this respect, a piece of wood an inch and a quarter in width, and half an inch in thickness, is to be placed edgewise between the molar teeth of the left side. The forefinger of the left hand is then to be introduced at the right angle of the mouth, and passed down over the tongue till it encounters the epiglottis.

But little difficulty is generally experienced in carrying the end of the finger above and behind the epiglottis so as to overlap it and press it forwards towards the base of the tongue. In some individuals the finger may be made to overlap the epiglottis to the extent of three-fourths of an inch.

Thus placed the finger serves as a sure guide to the instrument to be used. The knife is then to be conducted with its concavity directed downwards, along the finger till its point reaches the finger-nail. By elevating the handle so as to depress the blade an inch to an inch and a half farther, the cutting extremity is placed in the glottis between its edges; at this stage of the operation the knife is to be slightly rotated to one side and the other, giving it a cutting motion in the act of withdrawing it. This may be repeated without removing the finger, two or three times on either side. The margin of the epiglottis, and the swelling between it and the base of the tongue may be scarified still more easily with the same instrument, or scissors curved flatwise may be employed for these parts, guided in the same manner as the knife.

Though a disagreeable sense of suffocation and choking is caused by the operation, the patient soon recovers from it, and submits to a repetition after a short interval. In every instance the operation has been performed twice, and in some three times.

Before proceeding to the operation, it has always been explained to the patient, that the seat of his difficulty was a swelling at the top of the windpipe, preventing the air from entering, and the object of the operation was to cut it and let out fluid, and thus give him relief. This explanation corresponds so exactly with his own sensations, which refer to the top of the thyroid cartilage as the seat of obstruction, that he readily submits to the proposed operation, and renders all the coöperation in his power for its performance.

A slight hemorrhage follows the scarifications, and should be encouraged by gargling with warm water. In one instance the quantity of blood mixed with sputa amounted to half a wineglassful.

W. H. V. B.

ANÆSTHETIC AGENTS.

The committee to which was entrusted the Report on Surgery, at the last meeting of the association, have, with commendable zeal and industry, devoted much time and a considerable share of their paper to the consideration of anæsthesia, in surgical practice. The advocates and opponents of ether and chloroform have furnished the medical public with a vast amount of reading matter, within the last two years—at first, occasionally, allowing themselves to be betrayed into the injurious asperities of partisan warfare, but, of late, manifesting a disposition to strive, more for the good of science and humanity, than to sustain their own favorite ideas, or preconceptions. The mass of testimony, now accumulated, we think, may be fairly regarded as amply sufficient to justify the formation of individual opinion, and to settle several points which for some time were matters of doubt and uncertainty.

The committee have considered, briefly, the history of the introduction of ether into surgical practice. With this point, however, our readers, both as Americans and as medical men, are so familiar, that we shall only detain them with a recapitulation of Dr. Warren's operations at the Massachusetts General Hospital.

On the tenth of October, 1846, Dr. W. removed a tumor from the neck of a young man, whilst under the influence of sulphuric ether. On the 17th of October, Dr. George Hayward removed a fatty tumor from the arm of a hospital patient. Hitherto, the so-called "Letheon" had been used; but as this was a secret remedy, the surgeons very properly refused to proceed further in their experiments, unless the nature of the anæsthetic agent was fully revealed. Dr. Morton having made known that sulphuric ether was the article used, an amputation of the thigh, for diseased knee-joint. was performed on the 7th of Nov., 1846, by Dr. George Hayward. The results, in the foregoing cases were considered so satisfactory, that—

From this time the inhalation of ether was adopted in the practice of the Massachusetts General Hospital, and received the warm approval of the Board of Surgeons attached to that excellent institution.

Dr. Henry Bigelow's paper read before the American Academy of Arts and Sciences, on the 3d November, was published in the Boston Medical and Surgical Journal of the 18th, and was the first means whereby the discovery was made known to the world.

Within six weeks of the publication of this paper, ether had been tested in London, and found warm advocates amongst the surgeons of that metropolis; and in less than 3 months it was introduced into the Parisian hospitals, and was highly eulogized by the leading surgeons of Paris. From this point the fame of etherization spread rapidly through Europe. While these events were in progress, the practice was slowly adopted in the country of its birth; several weeks elapsed after the publication of Dr. Bigelow's paper before the subject was noticed by the medical press of the United States, and then it was in tones of doubt and incredulity, and it was not for several months that the practice became at all popular south of Boston. The first operation performed under the influence of ether, in the New-York Hospital, was in February, 1847.

We need not say how, since the time mentioned, the use of anæsthetics has become, with the immense majority of the profession, an established rule, where the performance of nearly all serious operations is concerned. As experience has accumulated, new facts tending to settle the conditions under which ether or chloroform may be safely and properly administered, have developed themselves—and although this is a problem which has not been finally worked out, we may hope for its speedy solution through the honest and enlightened efforts of the host of scientific men, now engaged in its consideration.

Professor Simpson's paper on the "Superinduction of anæsthesia in natural and morbid parturition; with cases illustrative of the use and effects of chloroform in obstetric practice," was read before the Medico-Chirurgical Society of Edinburgh, on the 1st of December, 1847, and reached this country in the early part of this year. It created a strong impression favorable to the new agent proposed by Dr. Simpson, and induced many practitioners at once to adopt it as a substitute for ether. The advantages claimed for chloroform over ether by its advocates, are its more rapid and intense action; without the vascular, muscular and intellectual excitement, which usually precedes the full impression of ether.

The question of the superior merits of the only two anæsthetics which are worth considering—ether and chloroform—is not decided. Many surgeons who have used both, prefer the former. Thus, Dr. Watson, of the New-York Hospital, quotes his colleague, Dr. Buck, as coinciding with him in the opinion that ether is the safer agent, inasmuch as "we have, as yet, become aware of no decidedly fatal case from its use, as we have from that of chloroform, nor of any in which its ill effects have been so serious as to lead to its total condemnation." Professors Horner and Mütter, of Philadelphia, agree with the surgeons of the New-York Hospical,* not from what they themselves have seen so much as from the published accounts of fatal cases from chloroform. We know that many surgeons of eminence prefer the latter. Further experience, however, is wanting to enable us, definitively, to settle this question. The committee are disposed to consider sulphuric ether entitled to the preference. The fatal cases occurring in Cincinnati and New-York, in which death may, without doubt, be attributed to the use of chloroform, whilst, in America, we have no similar result due to the use of ether, certainly furnish strong support to the correctness of this opinion. The second division of the subject, viz., the description of some of the more obvious phenomena which mark the action of ether and chloroform on the system, is, as the committee say, one of much importance, and the reader is referred to the very able paper of Dr. Bigelow, of Boston, for information on this point. Dr. B. makes reference to nitrous oxide, aldehyde, nitrate of ethyle, bisulphuret of carbon, benzoin and chloric ether, as having been used to produce anæsthesia. The vapor of chloric ether has been employed in the Massachusetts General Hospital with much satisfaction. It is considered to resemble in its effects sulphuric ether; differing in being less irritating, less powerful, and in possessing a more agreeable odor. The other substances mentioned have been pretty much, if not entirely, discarded from surgery, for very sufficient reasons.

By comparing the quantity of each, requisite to produce the same degree of anæsthesia, it is inferred that one drachm of chloroform is equal to one ounce of sulphuric ether. With regard to the modus administrandi, Dr. B. thinks, that for ether—"To avoid its odor, to retard its evaporation, and for brief and repeated exhibition, an inhaler is convenient; but for common purposes, a bell-shaped sponge is quite sufficient. For chloroform, Dr. Simpson's plan of using a folded handkerchief is recommended, when etherization, (by which the effect of chloroform is also understood,) is desired for a short time. A pasteboard cone, a lamp-chimney, a stethoscope, or any tube containing a sponge, answers for obstetrical purposes"—while for the rapid and complete insensibility required for surgical purposes and for hospital use, some more durable form of apparatus is requisite. In all these, Dr. B. alludes to the imperative necessity of having a free and full supply of oxygen, which, as contained in atmospheric air, must be mingled with the anæsthetic vapor. Two stages of etherization are noticed by Dr. B.

First Stage.—The first stage is characterized, either by the incomplete or partial character of the narcotism or by its brief duration. These phenomena suggest the notion that the blood is insufficiently impregnated with ether, or that the vapor has affected a portion only of the circulating fluid, the influence of which upon the brain is soon counteracted by the arrival in the cerebral vessels of fresh and unadulterated blood. Such theory illustrates the degree and the duration of the phenomena attending such inebriation.

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* We have lately learned that, as a rule, chloroform, on account of its more certain and rapid action, and from the belief that proper administration renders it safe, is now used by the surgeons of the New-York Hospital.

The first stage requires for its induction a comparatively small proportion of the ether vapor. Insensibility, if complete, is brief, and the patient revives in a period varying from one to three minutes, commonly without nausea, headache, vertigo, or other sensations of discomfort. But in certain cases, and especially when either from pulmonary irritability, or want of determination on the part of the patient, the dose has been insufficient, and its inhalation by consequence protracted through a period of six or eight minutes, a different range of symptoms is presented. The patient may be bewildered, like a man waking from a deep sleep, or uncontrollable except by moderate coercion. At this time the pulse is natural, or yet more frequently accelerated, either from exertion; or perhaps it has not regained its normal standard after the unavoidable excitement of anticipation. Though, in the first stage of anæsthesia, we might expect the pulse to be accelerated, yet it often deviates but little from its natural standard. Nor is the pupil especially affected in this stage. The muscular fibre is yet animated by the nervous influence, and is generally somewhat rigid; the arm resisting flexion or extension. Occasionally it exhibits the phenomena of catalepsy, retaining any position given to the limb. In rare cases I have noticed the access of clonic spasm, local or general in its invasion. When the spasm affects the glottis, it gives rise to a peculiar symptom, to be alluded to hereafter.

To the first stage of anæsthesia belong those remarkable and unanticipated physiological phenomena, which seem to unlink the intimate connection between sensation and an intellectual recognition of it; between cognizance and memory; between will and action. A patient, thus partially etherized, is said quietly to criticize the amputation of his own leg, or resists the dentist's instruments, and to appearance suffers, and yet remembers nothing of it; or remembers, but has not felt; or, which is unpleasant and fortunately rare, has felt but could not move.

In the early history of etherization, the first stage only was produced, and to this fact, due to ignorance of the extent to which the narcotism should be carried, we may attribute many of the "unsuccessful" cases to be met with in the records of this time. We have, ourselves, seen unmerited blame bestowed on ether and chloroform, from want of this knowledge. A caution is given, very properly, against the use of the agents we are considering, in cases where the patient is athletic and excitable, unless sufficient aid be at hand to restrain him during the period of excitement. Violent resistance, however, is not often met with. Vomiting sometimes occurs as a consequence of this stage—not very frequently, we imagine, since it has only taken place once in about 150 administrations, principally of chloroform, in our own experience. The first stage, Dr. Bigelow says, is adapted to the purpose of the dentist. "The second stage is essentially characterized and identified by muscular relaxation."

Second Stage.—Such is the second stage of anæsthesia, essentially characterized and identified by muscular relaxation. Let the subjects of the last mentioned experiments continue inhalation. The arm, from time to time, when raised from the side, resists. Soon, however, it becomes flexible, and at last, falls passive and motionless. The voluntary muscles are now relaxed; and it is impossible at this moment to rouse the patient. This stage requires for its induction a considerable quantity of ether vapor, which may be presented to the pulmonary surfaces either rapidly in the course of two or four minutes, or a more diluted vapor may be administered during a protracted inhalation of many minutes. In the former case, anæsthesia is of rapid access, and in its most favorable form. But in the latter, the dilute and protracted inhalation is often accompanied with the annoyances of partial anæsthesia, and it will be stated in another part of this paper that other symptoms, especially that of vomiting, are quite apt to interfere with inhalation before the inebriation has reached its second stage. The commencement of this state of narcotism, characterized by passive flexibility of the arm, suffices for any brief surgical operation, which is not likely to be impeded by the movements of returning sensibility. Yet this insensibility at its inception, though complete, is brief, and the revival of the patient often sudden.

A few additional inhalations so impregnate the system with the vapor, that revival is deferred for some minutes after the inhalation of pure air. Ether is this way cumulative in its effects. Besides this, recovery is then generally not instantaneous, but gradual and preceded by the signs of returning consciousness which indicate the re-administration of the anasthetic, and enable the surgeon, thus, to anticipate interruption, protract the inhalation, yet a little longer and the inspiration becomes a snore, the pulse which may or may not have been previously accelerated, beats slowly; while the pupil is frequently, though not invariably, dilated.

Some little familiarity with these phenomena is required to enable the surgeon so to graduate inhalation as to continue the patient in this state of tranquil and deep sleep with safety.

Dr. Bigelow states that this can be done, with the requisite amount of experience. He speaks of having maintained insensibility for nearly or quite thirty minutes. We have done so for a longer time—once, for forty-five minutes, in a patient on whom Dr. Van Buren took up the external iliac artery, for aneurism at Poupart's ligament; and a second time, in the case of a child three years old, on whom the same surgeon performed the operation of tracheotomy for the removal of a foreign body from the larynx. In the latter case, complete anæsthesia was kept up for one hour. En passant, we may remark that both operations were perfectly successful and the recoveries rapid. Dr. Mott was present on both occasions, and expressed his unbounded admiration of the action of the anæsthetic (the mixture of ether and chloroform); but especially were his pleasure and surprise manifested in the tracheotomy case, which was rendered unusually tedious by a large congeries of veins, covering the anterior tracheal region.

Two most important conclusions arrived at by Dr. Bigelow should always be borne in mind. Our own experience affords the most ample proof of their correctness. They are given for the purpose of defining the limits of anæsthesia, in surgery. On the one hand he takes the signs of returning consciousness, before alluded to as indicating the propriety of re-commencing inhalation. On the other, a far more important indication—that for its discontinuance—is to be found "*in the diminution of the force and frequency of the pulse.* Without this safeguard," to quote his words, "I conceive that it might well be hazardous to overshadow animal existence by this mysterious and powerful agency. I have not hesitated to push etherization to complete insensibility, and to continue it, if necessary, for a length of time, provided the pulse remained full and strong. If it be retarded, it is curious to observe with what certainty it recovers force and frequency, after a few inspirations of pure air." It will be inferred from these remarkst hat the pulse is to be carefully examined during the whole anæsthetic process, and that inhalation is to be temporarily discontinued at its indication.

The *Signs of Narcotism* are given as follows:

The eyes are usually closed during inhalation. Let the patient be directed to open them. If etherized he takes no notice of the voice. Perhaps the head droops, or the hand supporting the inhaling apparatus falls. These, alone, are signs of narcotism which may be incomplete, or, if complete, temporary in duration. If, in such a case, the arm of the patient be raised from his side, it is quite likely to resist the effort: or, when raised, remains extended—phenomena indicative of partial narcotism.

One of the early and occasional consequences of inhalation is a passive cessation of respiration, while the pulse continues good. At this moment a tooth may be painlessly extracted.

Muscular relaxation, as shown by the temporary loss of muscular contractility—the passive flexibility of the arm—is the most valuable sign of complete narcotism. It is succeeded by snoring inspiration and slow pulse.

Signs of returning consciousness are swallowing, coughing, moaning, an effort to articulate and muscular movement.

Rapidity of access of Anæsthetic State.—This depends on idiosyncrasy. As a general rule it varies directly with the dose administered. Many of the unfavorable symptoms are due to protracted inhalation of too little vapor. From what we have seen we do not think it advisable to put the patient too suddenly under the influence of the vapor. A few inhalations of a moderate quantity will frequently prepare the pulmonary apparatus, so as to endure, without irritation or cough, the full administration of the anæsthetic.

"*Vomiting* is especially connected with the long duration of the inhalation, and also with its inadequacy." We think that very few writers, on the subject which now interests us, have attached sufficient importance to the state of the stomach, as regards repletion, before the performance of a surgical operation, during which protracted anæsthesia is essential. Dr. Mott has, for some time past, insisted that the patient should abstain from food for several hours before the operation, in order that the empty stomach might prevent the complication and inconvenience which the act of vomiting is often found to produce.

Dr. Bigelow devotes a section of his paper to the symptoms of anæsthesia, considered separately. The intellectual phenomena, mental excitement, pulmonary irritability, nausea and vomiting are noticed. As these have already been referred to and are soon appreciated by those having even small experience in etherization, we shall do no more than allude to them in this place.

The snoring inspiration indicates profound sleep. Varying a little in the facility of its production in different individuals, it is a constant phenomenon of a certain stage of narcotism. While it is often desirable to induce this symptom, its exhibition renders further inebriation unnecessary for the moment. It is always accompanied with muscular relaxation, and soon succeeds it. It results from the relaxation of the muscles of the palate; and in this connection it is desirable to distinguish it from another symptom, of somewhat different signification, viz:

Stertorous respiration, due to spasmodic action of the vocal chords, and allied to the spasmodic action of other muscles. It is somewhat rare in its occurrence; once heard, it will be readily recognised, and indicates a brief suspension of the inebriating process. Though of itself, it is quite unimportant, yet as the immediate cause of another symptom, it deserves further consideration. The closure of the laryngeal aperture shuts off the supply of atmospheric air from the pulmonary tubes. The same condition results from the voluntary closure of the mouth and lips; but the last soon yields, while the spasm of the glottis gives rise, in rare cases, to a partial asphyxia, indicated by the livid color of the cutaneous surface. Two or three inspirations suffice to restore the cheek to its natural color.

The sphincters occasionally, though not often, are relaxed, and the patient voids urine and fæces. This, we believe, occurs only in the second stage of anæsthesia.

The pulse is usually much quickened by the excitement attending etherization. From this fact, it is difficult to estimate its frequency, at the early part of the administration. It does not lose either in force or frequency, until the whole system is profoundly narcotized.

Prolonged insensibility after inhalation is not often met with, though patients have occasionally been known to relapse into the narcotic state after having been once more or less completely aroused. Convulsions have been reported, occurring at the interval of many hours after inebriation.

Vertigo, headache, and disability for labor, have ensued; in one case related, for several months after ether had been inhaled.

Consequences similar to the above have been used, by those who condemn etherization, to demonstrate the impropriety of producing anæsthesia. The great discovery has not many such opponents at this day, and we may observe with Dr. Bigelow:

> Such cases, with others which have been detailed, must be considered as exceptional, due to peculiar and individual susceptibility, and they are also of exceeding rare occurrence.

The degree of anæsthesia adapted to different operations in surgery is specially alluded to. This depends on the length of the operation and the indication in any given case. In hernia and dislocations, the second stage is, of necessity, required to ensure muscular relaxation. Snoring indicates the point beyond which, for the time, there is no need of continuing the inhalation. Attention to the pulse will prevent us from passing the dangerous limit, beyond which fatal narcotism is to be feared.

The best antidote, when an overdose has been administered, is to allow the patient to remain tranquilly in the horizontal position and to insure a plentiful supply of fresh air. Artificial respiration is spoken of by our author, but we know of no case in which it has been proved to be beneficial. By some of the English experimentalists it has been condemned.

> Brandy and other diffusible stimulants, appropriate remedies for syncope, belong to the class of agents which induce the anæsthetic symptoms, and it is quite probable, though evidence is yet incomplete on this point, that the difficulty would only be aggravated by their use. Besides, the patients cannot always swallow. Cold water dashed upon the face, or injected into the ears, undoubtedly aids in arousing the patient from the common ether narcotism.
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> Galvanism to the precordial region has been suggested as a remedy in an extreme case; and it may be a question whether rest in the recumbent posture or active exercise, as adopted for the restoration of subjects affected with narcotism from opium, be best adapted for these cases. If any fluid is to be administered internally, analogy would suggest strong tea or coffee.

The nature of the anæsthetic state, a point of much interest, is alluded to and is considered by Dr. B. as analagous to ordinary alcoholic intoxication.

> Both, in small quantities, produce exhilaration. Both, in a large dose, produce the phenomena of dead drunkenness, and both, insensibility to pain. With alcohol, the state persists while the fluid remains in the stomach; and patients have been at once aroused by the use of the stomach-pump. In like manner anæsthesia continues while ether vapor fills the lungs; respiration pumps the ether vapor from that receptacle, and gradually aerating the blood, terminates the anæsthetic state. Alcohol is found in the blood by chemical analysis; ether is equally detected in it by its peculiar odor.
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> Convulsions have been noticed in rare connection, both with ether and with alcohol. Finally, there is in ordinary cases, no great solicitude for the safety of a patient who is dead drunk, and experience has shown that ether narcotism is very rarely accompanied with danger.

The concluding paragraph of Dr. Bigelow's paper is one which bears forcibly on the great question so often asked. Is the use of chloroform and ether to be recommended as a general thing and on ordinary occasions, as well as in cases where life is considered to be jeopardized by the duration and violence of pain, or a fatal shock to the nervous system is anticipated? This will be answered, as it has already been, very much according to the experience of the person who replies. Mr. Lawrence, in whose hospital the anæsthetics have been used "between two and three thousand times, without injury or accident," (to quote his own words) would probably answer in the affirmative; whilst we know of a surgeon who has declined to produce anæsthesia in future from a single fatal issue following a capital surgical operation, at some days distance of time; which issue, to our mind, was in no way attributable to the deleterious effect of chloroform.

Further experience is wanting, by many, to enable them to make up their minds on the point referred to. This they are rapidly obtaining, since, we believe, there is no part of the world in which surgery is recognised as a science, where anæsthesia is not daily, in hundreds and thousands of instances, produced. Dr. Bigelow's language expresses our sentiments so exactly, that we should not do so well were we not to quote his concluding paragraph—

> If there is any one consideration calculated to arrest attention in the history of etherization, it is, that although the anæsthetic agents have been open to liberal use in every part of the civilized world, whether experimentally, ignorantly, or carelessly; although thousands have experienced their good effects; and although the physiologist, the ether opponent, and the coroner, have been equally ready to seize upon and to exaggerate any case of accident that might seem to fall within their range; yet it is probable that the number of cases, thus publicly suspected, have been less than ten, while the only conclusive instance of direct relation between an anæsthetic agent and death are two in number. Can antimony or opium show as clean a bill of health for the same period? Can leeches or the lancet do better?

Appended to the report of the committee are several statistical tables of operations performed under the influence of ether and chloroform, at public institutions in Boston, New-York, and Philadelphia. These, taken with the reports, not tabulated, from different surgeons to whom the committee applied for information, amount to upwards of 300. The invariable result, we gather from the report, on the minds of those who have had experience in anæsthesia as applied to surgery, has been a firm persuasion of the usefulness and propriety of its production, in nearly all cases requiring the use of the surgeon's knife or painful manipulation. Special reference is made to the operations of lithotomy, for strangulated hernia, for amputations of nearly every kind, for examinations attended with great pain, as in explorations of the bladder, the vagina, and other parts, rendered preternaturally sensitive by disease.

Were it within the scope of our article, we might easily adduce numerous instances, from the French and English journals, to show how the most formidable operations in surgery, such as amputation of the arm at the shoulder-joint, excision of the scapula and one-half the clavicle, amputation of both thighs, for a rail-road accident, in which the two legs were shattered, have all been performed, with complete success, whilst the patients were under the full influence of ether or chloroform vapor.

The next report, at the meeting of the association in 1849, of the committee whose labors we have so hastily considered, may be looked to with much interest. We doubt not that such general returns of the action of anæsthetic agents will be furnished by American surgeons and physicians as will suffice to form rules of practice for the profession at large, who, we hope, will be as little fearful of employing the narcotic vapors as they now are of using antimony, opium, mercury, arsenic, or the lancet.

J. T. M.

Art. IX.—*An Inquiry into the Degree of Certainty in Medicine; and into the Nature and Extent of its Power over Disease.* By Elisha Bartlett, M.D., Professor of the Theory and Practice of Medicine in Transylvania University; Member of the American Academy of Arts and Sciences, &c., &c. Philadelphia: Lea & Blanchard. 1848. 12mo. pp. 84.

The scope of this work is worthy of a Professor of the Art and Science of Medicine, and the style is quite refreshing, it is so clear, so elegant, so classic. Some parts of it remind us of the dignity of Celsus, the elegance of Gregory, or the clarity of Cullen. There is the purity and honor of a high, well-formed and well-instructed mind, discernible in every page. If Medicine be not all the author thinks it is, the fault is, that the *Art* has had so few who follow it as a *Science.* Enthusiam in a science, may not free us from the curse of ignorance and error, but it will never leave us easy under it. The man who practises the art of medicine for the gains alone, who just adopts the current, or the stagnant notions of the day, in order to secure the keeping of his patient safely towed along the dull canal of unexplained and unexplainable routine, is not the man to give us doubts or their solutions.

The author is a man most thoroughly and far removed from any such suspicion; and in an able, open, and unvarnished—yet not unpolished manner—has given us a close investigation of a most important question, "What is our practice worth?" The pleasant, glowing style in which he writes, if used with specious purpose, and employed with skimming touch of his great subject, might have left a wide impression, and been a profitable undertaking, if he had been lucre-minded. He, on the contrary, has selected for examination, a disease, which probably is less under the control of medical art, than any other, and with rigorous patience, dodged it through the mathematical test of figures, the most exact, the most relentless test.

He singles out *pneumonia* for examination. He might almost as well have singled out cholera or the plague; for in pneumonia the very source of life is *dis*composed, oftentimes *de*composed, disorganized, and destroyed. The difficulty of restoring a man with diseased lungs, is much the same as making an organ perform well with broken bellows.

Every one must perceive the thorough honesty of the selection. If the result of the examination had been more favorable, we should have been surprised, not to say delighted—as it is, we are content. *We* draw a very different conclusion from our author, but not adverse to him. First, let the author speak, ourselves will follow.

> I am stating only what everybody knows to be true, when I say that the general confidence which has heretofore existed in the science and art of medicine, as this science has been studied, and as this art has been practised, has within the last few years been violently shaken and disturbed, and is now greatly lessened and impaired. The hold which medicine has so long had upon the popular mind is loosened; there is a wide-spread skepticism as to its power of curing diseases, and men are every where to be found who deny its pretensions as a science, and reject the benefits and blessings which it proffers them as an art.
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> It is not necessary, for my present purpose, to point out the causes and influences which have led to this state of things. I will merely say, in this connection, that however trifling and inconsiderable may have been the effects upon the feeling to which I have alluded, of the famous article of Dr. Forbes, first published in the British and Foreign Medical Review, I give utterance, I suppose, to the almost universal sentiment of the profession, when I express regret that the author of that article did not accompany his official and voluntary confession of medical delinquency, incompetency, and uncertainty, with the qualifications and conditions absolutely essential to the truth of the confession itself. This, Dr. Forbes has almost wholly neglected to do. Without entering into any elaborate criticism of his paper, it is quite safe to say, that he has taken, if not a distorted, at least a partial view of his subject; he has looked at one side only of the shield; one hemisphere only of his world of truth has been turned to the sun. Now, this partial view is necessarily a false view: it is false because it is partial—if for no other reason. Dr. Forbes has drawn, in strong and exaggerated colors, the manifold imperfections of medical science, and the discouraging uncertainties of medical art; but he has neglected to show the limits of those uncertainties, and to circumscribe the boundaries within which these imperfections are confined. This he should have done, and not only would his second picture have constituted, on the principle of contrast, often followed by artists in such matters, an appropriate companion to his first,—the clearer and more radiant sky, the steadier and serener light, the erect figures with hopeful and forward-looking faces of the former, brought into striking and beautiful relief by the cloudy and uncertain horizon, the murky and dim atmosphere, and the constrained and groping shapes of the latter—but more than this: his first delineation is a true one only when the second hangs by its side; the harmony of the lights and shadows, and the truthfulness of the objects in each picture, are dependant upon the presence of the other.
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> The canvass, which now stands upon my easel, is placed there to receive, at least the outlines, and some of the leading and more prominent features of

> this second picture. I have waited, I think, long enough for Dr. Forbes, or for some one else better qualified than myself, to do the work which I have here undertaken. If Ulysses is not present in the field to bend his own bow, some weaker arm from the camp must essay the enterprise. It seems to me high time that a clear and earnest word should be spoken for the science which we study and teach, and for the art which we inculcate and practise. The interests of truth, of our profession, and of humanity, alike demand that the legitimate claims of medicine to the regard and confidence of mankind should be vindicated and maintained. And this is the task I have set myself. I wish to show as clearly and as positively as I can, the nature, and the degree of the certainty that belongs to medicine as a science, and as an art. In doing this, I shall deal but little in general assertions, unsustained by positive proofs, and not at all in empty and vague declamation; I shall state the reasons of the faith that I profess, and I shall exhibit the evidence upon which it rests.

From this page to the sixteenth, there is a very elegant and excellent defence of the two sciences of Anatomy and Physiology, which we would with great pleasure quote, but that our purpose and our space do not admit. We therefore give in the author's own words, his own task, and select from his performance such parts as we think best adapted to display it.

> It is not, however, against these departments of our science that the accusations to which I have alluded, have been brought, so that there is no occasion for my giving to them any thing more than this general and passing notice. It is unnecessary to make a formal defence of a point which is never attacked. The charges of which I have spoken, refer particularly, and almost exclusively, to that department of medical science, designated by the terms *pathology* and *therapeutics.* This department is constituted by the phenomena and relations of disease; it embraces all these phenomena, and all these relations. It professes and claims to consist of, a knowledge of the causes of disease, of the seat and phenomena of disease, and of the means of preventing, mitigating and removing disease. The charges against our science are, that it deceives itself in this matter,—that its pretensions are either altogether false, or greatly exaggerated—that its knowledge of disease is vastly less than it professes to be—and especially, that its power of curing and of mitigating disease has been immensely over-estimated and over-stated. These charges sometimes deny altogether the existence of this power, although, in most instances, they content themselves with the allegation that it is very limited in extent, and very uncertain in its application.

The first reply which he gives to this charge, is as follows:

> The first inquiry that presents itself relates to the local lesion which constitutes, anatomically, the disease. What, and how much do we know of this lesion?—of its seat, its phenomena, its nature? What are the foundations, the nature, the extent, and the degree of certainty, of our knowledge of these things? The answer to these questions is at hand; it is definite and it is sufficiently satisfactory. We know that with the commencement of the inflammation, the portion of lung which is the seat of this morbid action, becomes of a deeper red color than it has in health, with a livid or violet tinge; that its specific gravity is increased, from an undue accumulation of blood in its vessels, and a corresponding diminution of air in its air-cells; that it has lost, in a great degree, its spongy and elastic feel, and is more doughy and solid to the touch; that it is less tough and more friable; and that when cut or torn, a large quantity of reddish, turbid, and frothy fluid flows from the surfaces. We know that except in a very small number of cases, in which

this stage of engorgement continues until the subsidence of the disease, in the course, generally, of from two to five or six days, the diseased lung undergoes other and still more striking changes. Its specific gravity is still further increased, so that it is as heavy and solid as liver; it contains no air and does not crepitate; its air-cells are obliterated; its surfaces, when cut or torn, are of a deep red color, often mottled or marbled; a reddish, thick, opaque, and semi-purulent fluid flows from them in moderate quantity, and they are crowded with a multitude of small, red, slightly flattened, granulations. When the disease does not destroy life, this condition of the lung, after having persisted for a few days, gradually disappears, and the lung as gradually returns to its former state. In a few fatal cases death takes place while the lung is still in the condition just described; but in a large proportion of these cases, it becomes soft and still more friable, and from violet-red, it becomes of a grayish or yellowish color. Such are the characteristic anatomical phenomena of this local lesion. They are very constant, with the conditions that have been stated, and they have been ascertained with entire and absolute positiveness. A certain class of physicians—I mean the homœopathists—deny the value and usefulness of this knowledge, but no one doubts the certainty of the knowledge itself.

Now, with all due deference to the knowledge thus acquired, we say that this account of the *effects* of the disease, does not give us one particle of information of the *causes* of it. Here are certain appearances and symptoms observed, but *how* and *why* they were produced, we know not, at least the *appearances* and *symptoms* do not teach us.

Suppose we take a man, whose knowledge of the agencies and powers of nature is only that possessed by man in common life, and show him some of the vast geological phenomena: will he from these appearances, correctly trace the hidden causes of them? Let the industrious students of geology reply. Morbid anatomy, a wondrous storehouse of most valuable facts, does not instruct us in the theory of disease. A man may know a dozen languages, and yet may be unable to deduce the etymology of a single word in any one. The etymology is a distinct science.

We are therefore, not disappointed, when we find that all which the author has to give us, is the statistic tabular accounts of Louis, Grisolle and Jackson, respecting the result of bleeding and the use of antimony in the treatment of pneumonia. After some preliminary observations on the high probabilities of the good effects of bleeding, the author gives us what he deems the positive knowledge on this subject.

Between the years 1821 and 1827, Louis studied carefully, and from day to day, at La Charité, the effects of blood-letting in fifty cases of pneumonia, terminating favorably, and in twenty-eight cases which terminated in death. The patients were bled from one to four times, according to the indications in each case; from ten to fifteen ounces of blood being taken at each operation. Of the fifty cases terminating in health, twenty-three were bled, for the first time, within the first four days from the commencement of the disease, and the average duration of the disease in these cases was seventeen days; twenty-seven were bled, for the first time, between the fifth and the ninth days, inclusive, and the average duration of the disease in these cases, was twenty days. Every possible precaution was taken, that the two groups of cases, thus compared with each other, should be essentially alike in all the circumstances that could, in any way, affect the danger of the disease. Louis studied, further, the effects of the same remedy upon the leading symptoms of pneumonia.

He found that the pain in the side was never wholly, and at once, removed by an early blood-letting; but, that on the contrary, it was generally more severe, for twelve or twenty-four hours after the first bleeding, if this was practised early in the disease. He found, however, that the average duration of the pain in the first group of cases, was six days, and a little over eight days in the second group. He found that most of the other symptoms were moderately influenced by the bleedings. Between the years 1830 and 1833, Louis studied in the same manner, at La Pitié, the effects of blood-letting in twenty-nine cases of pneumonia, four of which terminated fatally. Of the twenty-five cases terminating favorably, thirteen were bled between the second and fourth days of the disease, inclusive; and the average duration of these cases was fifteen days and a half; the other twelve cases were bled from the fifth to the fourteenth day, inclusive, and their average duration was eighteen days and a quarter. No one of these cases was bled on the first day of the disease. The first bleedings were a little more copious than in the cases at La Charité. The effects of the remedy upon the individual symptoms did not differ from those in the latter cases.

So far as this limited investigation could settle the question, Louis considered himself justified in coming to this conclusion—that blood-letting has a favorable effect upon the march of pneumonia; that it abridges its duration; but that this effect is much less than had generally been supposed, patients who are bled during the first four days of the disease, all other things being equal, recovering four or five days sooner than those who are bled later. And as far as this particular investigation is concerned, the conclusion is perfectly justifiable and legitimate. It results with a slight qualification, necessarily and inevitably, from the facts; and Louis never pretended to carry the conclusion beyond this. He says, expressly, that these facts are neither sufficiently numerous, nor sufficiently various, finally to settle the question at issue; and that he publishes them principally, for the purpose of calling anew the attention of observers to the subject. It is important to bear in mind that these investigations show directly, not so much the absolute effects of blood-letting, as the difference in its effects when performed early, or late, in the disease. His conclusions, so far as his own facts are concerned, would have been more truly stated, if he had confined it to early, compared with late, blood-letting.*

Now, supposing that we admit the whole of the conclusions deduced from M. Louis' observations, what is the amount of our information? simply, that out of a number of cases of pneumonia, those who are bled are more likely to recover than those who are not, and those who are bled early, are more likely to recover soon than those who are bled late.

That to lessen the quantity of blood which passes through inflamed parts, is good for them, is certain, provided we can secure plenty of good blood to heal them, when we require it. But we protest against this being considered proof of any positive knowledge on the subject of the disease and its treatment. *In what does inflammation of the lungs consist? What are the certain means of stopping that process and restoring the parts to health?* These are two questions which receive no answers from the results of bleeding.

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* There is one other important conclusion of Louis', which is not kept strictly within the limits of his facts. It results from his investigations, he says, that pneumonia is not *arrested* by early blood-letting. It would have been more exact to have said, that, according to these investigations, pneumonia is not arrested by bleedings, *practised after the first day of the disease.* I do not mean to say that this conclusion is a false one; I say, merely, that it dees not follow directly and necessarily from the facts from which it is derived. The somewhat moderate difference between the effects of early and late blood-letting, might justify the *probable* conclusion, that blood-letting at the very onset of the disease, would still fail to arrest it; but this question could be positively settled, only by this particular application of the remedy. The effects of blood-letting might be very different within the first few hours, and after the first day of the disease.

An acute observer of disease and remedy, would perceive that as inflammation consisted in some disturbance of the circulation, and health consisted in the restoration of the circulation to its original condition, the *secret of remedy* would be found in the management of the *cause* of the circulation. The *blood* is not the *cause* of its circulation; for the selfsame quantity of blood may be in the vessels when it does not circulate at all, as when it does most healthily, as daily instanced in concussions, epilepsy, and so forth. *The taking away of blood does nothing directly but alter the quantity.*

Indirectly, by taking away the fluid which *contains* the life, we diminish *the life itself*, and *the means of obtaining life*, the *respiration. Bleeding, therefore, diminishes the quantity of life.* Can a man have too much of life? It matters not, that from the days of Hippocrates, down to now, bleeding has been adopted. It matters not, that it relieves the tension, and of necessity the pain of an inflamed part, it does not act upon the part diseased, producing any change in its condition. How, therefore, can we designate it as a remedy?

The following quotation is so full of sound sense and philosophy, that at the apparent risk of being tedious we give it:

> In order to know exactly and positively the effects of remedies, we ought to be able to compare groups of cases treated by them in all their varieties and combinations, with corresponding groups of cases left to themselves, or treated without these remedies. This is obvious. We cannot know certainly what are the effects of our treatment, unless we have some reasonable and positive assurance as to what would have been the course and termination of the disease if the treatment had been omitted. In the case of pneumonia, as well as in that of most other grave diseases, this knowledge is in a good degree wanting: at least it is scanty and incomplete. The conviction is so general and so strong that this disease may be controlled by remedies, that it is hardly ever left to itself: and certainly no physician, in the present state of our knowledge, would be justified, merely for the purpose of elucidating and determining this question, in adopting such a course. We have no right to sacrifice the interests of humanity to those of science. But the positive and conclusive evidence derived from this comparison is not altogether wanting. It could hardly have escaped observation, that pneumonia might terminate in recovery, quite independent of any aid derived from medical art. Cases must always occasionally, and not very unfrequently have been met with, in which from circumstances of one kind or another—the caprice or necessities of the patient, or the neglect of the physician—no active remedies were made use of, and which still ended in health. Besides this, the use of the leading remedies, although very general, has never been absolutely universal. One practitioner has treated his patients without blood-letting, another without antimony, another without mercurials, another without blisters, and still, with all these omissions, patients have continued to recover. This must have rendered it sufficiently obvious at least, that no one of these remedies was absolutely necessary to the cure of the disease. But we have evidence upon this subject still more precise and definite, which it is important that I should give. I have already referred to five of Dr. Jackson's cases in which general blood-letting was omitted, and which terminated in health, but in which the average duration

of the disease was considerably longer than in graver cases where blood-letting was practised. During the year 1840, Grisolle treated eleven patients attacked with pneumonia, *without using any active remedies.* The patients were mostly young, one only having reached the age of fifty-six years; and all the cases were sufficiently mild to justify M. Grisolle, as he thought, in leaving them without any active treatment. They were confined to bed, on a light diet, had some pectoral drinks, and, in a few instances, a simple laxative, like castor-oil. In nine cases, the inflammation had reached its second stage when the patients entered the hospital; in two, it was still in its first stage, and did not pass into the second. *The cases all terminated favorably*, but it is very important to remark, that, considering the limited extent of the inflammation, and the general mildness of their character, *the prominent symptoms of the disease persisted for an unusually long period of time.*

There is more of statistical information of the results of bleeding, but we can only give one short quotation on this subject.

Louis has *demonstrated* that the circumstance of a few days' difference in the time of practising blood-letting, makes not merely a trifling and unimportant, but a very considerable difference in the duration of the disease, and a corresponding difference in the duration of its leading symptoms. Grisolle has *demonstrated*, in the same manner, that mild and slight cases of the disease, although they would recover without any active remedies, *have all their prominent symptoms very greatly mitigated in severity and shortened in duration by blood-letting.* These cases do not absolutly prove that the remedy saves life, because in these cases life is saved without it; but they do prove the favorable action and effect of the remedy—all that they are capable of proving, in the nature of the case.

The next part of the subject, is the tartar emetic treatment. We honestly confess this goes as much against our stomach as the bleeding was against our heart. We have both given and taken considerable doses of this compound, and are able to appreciate its operation on the bodies of pneumonic patients. The author seems to entertain a high respect for antimonial treatment, and is full of matter, which, to him, is most important. We will let him appear for himself.

M. Grisolle arranges the cases, in which he studied the action of antimony, in three groups or series. The first of these consisted of forty-four cases, observed at the Hotel Dieu, during the years 1839 and 1840, *in which no active remedy was made use of excepting antimony.* Thirty-six of the patients were males, and eight females. Their ages varied from fifteen to seventy-one years, the average being thirty-seven. Nine had vigorous constitutions; fifteen had constitutions of medium strength; and the remainder, nearly one-half, were thin and delicate. In thirty-five cases, the inflammation had entirely passed into the second stage, when the special treatment was commenced; in the other nine, the inflammation was, at least for the most part, still in its first stage. The disease was generally grave; in no case was it mild; in more than three-quarters of the cases at least the half of one lung was involved. In all the patients the disease was sufficiently severe, at the commencement of the treatment, to render its issue more or less doubtful. The treatment was begun from the second to the ninth day of the disease, the mean period being the fourth day. Six grains of emetic tartar was the quantity usually given, in the twenty-four hours, in five ounces of a sweetened vegetable infusion. Sometimes only four grains were given, and the quantity was never carried higher than twelve. If the effects of the remedy on the stomach and bowels during the first day were violent, on the subsequent days, a small quantity of an opiated syrup was given at short intervals. This treatment was kept up from one to four days, the average period being about three and a half days. Most of the patients took, in the whole, about twenty grains: in no instance did the quantity exceed sixty grains. Vomiting and purging were present in every case, at least for the first day or two, the latter generally predominating. Of thirty-six patients to whom the antimony was given for several days, there were seventeen in whom the vomiting and purging wholly ceased after the third or the fourth day. Of the forty-four cases, six terminated fatally, a little less than one-seventh. The mean age of these patients was over fifty years, and the treatment was not commenced till after the fifth day. The following were the apparent effects of the remedy upon the principal symptoms of the disease. The pain in the side, even when it was excessively severe and acute was generally greatly relieved, or altogether removed. Of thirty-four patients in whom the pain was present when the treatment was commenced, *twenty-three were considerably relieved from the first day; in five the pain, which was excessively acute, was entirely removed.* In five other cases, the pain did not begin to diminish till after the second day; in three it became more violent, and persisted till local bleeding was resorted to. One of the most constant and striking effects of the remedy consisted in the diminution in the force and frequency of the pulse. *In twenty-seven patients, of the thirty-eight who recovered, the pulse on the second day had diminished to the extent of from ten to forty in the minute;* in six the diminution did not take place till the third day; in four not till the fourth; and in one the rapidity of the pulse continued during a considerable part of the period of convalescence. The diminution in the frequency of the respirations was less striking and uniform. As a general rule, the improvement was most marked in cases where the breathing was most accelerated. The viscid brick-dust expectoration lost its pneumonic character and became yellowish or colorless, in most cases within from one to two or three days. *With a single exception*, in which the physical signs continued to increase for four days after the use of the antimony was begun, *these signs either remained stationary, or began to diminish from the first day.* Thus, in eighteen cases, signs of resolution were manifest at the close of the first day; in eleven, at the close of the second; in two. at the close of the third; and in five, at the end of the fourth. Still, the stethoscopic phenomena were never entirely removed in this short period of time; some traces of them remained, in most cases, at the time when the patients left the hospital. *The heat of the skin, the headache, the thirst, and the general restlessness diminished or ceased with the same promptitude.* Another very striking and very constant result of this treatment was seen in the rapidity of convalesence, and in the small impairment of the muscular strength. The mean duration of the disease was ten days. In more than half of the patients who died, the use of the antimony was followed by a temporary mitigation in the severity of the disease.

We cannot say that we are one whit more in love with tartar emetic, than we were; and the mention of it always makes our "gorge rise." Much as Rasori, Louis, Trousseau, and Grisolle, on the continent, are enraptured with it; much as the Elliotson and Clutterbuck school, in England. may patronize it, still we feel justified in denouncing its use.

For an art to claim the respect of a science, by putting forth a statement that after the lapse of two thousand years, the best discovered mode of treating pneumonia, is by bleeding and giving large doses of tartar emetic; neither of which, nor both combined, can do more than mitigate the symptoms in a proportion of cases, is not to make out a strong case. The philosopher and philanthropist will scarcely recognise the claim, and a court of equity would hardly decree in favor of it if contested. It does not appear to us that such *remedies* are worth the time, attention and respect, which are claimed for them in so many colleges of learning and science throughout the world.

We remember a Professor of Toxicology, who announced that he had discovered a new test for arsenic, which he thought would be of immense importance. The medical world thronged to see the application of the test. Much time was employed in preparing and applying it, and all were on the tip-toe of expectation. The test was applied; but no phenomenon appeared. Again it was applied, but without the slightest effect. We ventured to suggest that the Professor might perchance have taken the wrong bottle. He assured us that *he* was correct. We ventured on another observation, that perhaps the *test* had not been properly prepared, or that there was no arsenic present in the substance tested. Both of these ignorant, not to say impudent suggestions, were rejected with disdain. We waited, and a pause ensued. The Professor, taking off his spectacles and passing his white handkerchief over his forehead, said, " Gentlemen, I have occasionally found this test cannot be relied upon; but usually it is a safe one!" Such are our *remedies*, only the sentence ought to be reversed. " *Occasionally*, they are useful, *but in general* they cannot be relied on."

We wish we could give more space to our author's own remarks. There are several pages of refined and eloquent writing, which show how ardently he cultivates himself and his profession. Most certainly, medicine would be a most exact science, if he could, by benevolent enthusiasm, make it so. Alas, that science is so mathematically, so methodically hard of heart. No poetry, no eloquence, can win her—she must be physically sapped and mined—logically won—the barrier to her citadel must be removed, like the last barricades of France—stone after stone—one at a time, by patient plodding.

We now quote from the other portions of the book such proof of the truth of medical science as our author furnishes for us. He groups diseases, and presents us with the ascertained effects of remedies.

His first group consists of such diseases as " *common catarrh, simple acute diarrhœa, and simple jaundice*." Of these he merely says—"They may, generally, be safely let alone—but most of them may be favorably influenced by an appropriate medication." Modest enough, certainly, and agreed to.

His next group is " *Functional dyspepsia, chorea, and chlorosis*." The only thing which is adduced to prove our science here, is in the following sentence: " If our science and art had done nothing more than to ascertain the effects of iron upon this malady, (chlorosis,) they would have presented a gift to humanity, that ought at least to shield them from the blind and bitter assaults of arrogant ignorance and wooden-headed stupidity."

The author's wheels are warming, we may expect some fire soon. The next group is " *Sporadic dysentery, simple acute rheumatism, acute pleurisy, tonsillitis, catarrhal croup, and so on*." Of these he says, we cannot do much for them, except give opium for dysentery, and an emetic for croup.

The fourth group "includes most of the serious *local inflammations*, and all the *general fevers—continued, periodical, and exanthematous. Whooping cough, Asiatic cholera, erysipelas and delirium tremens.*" We must here let our author speak out.

> "These diseases differ so widely amongst themselves, in their relation to remedies, that it is difficult to speak of them in general terms. Some of them are more obviously and more uniformly influenced by remedies than others. There is no more doubt, for instance, of the favorable effects of blood-letting upon inflammation of the pericardium, of the liver, of the kidneys, than there is of these effects on pneumonia. There is no more doubt of the efficacy of wine, in certain stages and conditions of British typhus, than there is of the effects of antimony in pneumonia. Every day, there are multitudes of patients with this disease, as directly and obviously saved from death by active stimulants, as the life of a famishing man is saved by food And we find here one of the most constant, and one of the most important therapeutic relations—I mean that between periodical fever and Peruvian bark. The power of opium to allay functional spasm, and to abate neuralgic pain; the antiphlogistic action of antimony, in inflammation of the lungs; the effects of an emetic in catarrhal croup, of iron in chlorosis, of wine in low typhus, are not more invariable and certain, than is the power of cinchona to control and arrest the periodical element, in the great family of malarious fevers. The simple forms of these diseases do, indeed, very commonly subside and cease; they rarely destroy life immediately and directly; but their repeated occurrence at length undermines and breaks down the constitution, while in their more violent manifestations, they are as suddenly fatal as yellow fever; and for the prevention of these results, we have one reliable and heroic remedy—cinchona. Somewhat as I said of iron in chlorosis, this gift to humanity is a boon and a blessing, that ought to secure for medical science and medical art the deep and everlasting gratitude of the world."

We single out a sentence for comment, and shall then pass to something else worth noticing. The sentence is this: "There is no more doubt of the efficacy of wine in certain stages and conditions of British typhus, than there is of the effects of antimony in pneumonia."

To our mind, this is not saying much for the value of the wine. If wine be of any service in these cases, it is solely on account of its property of imparting caloric to the solids and fluids of the body. However, as this is done by the decomposition and destruction of a portion of the organization, we hardly know how this agent can be fairly called a remedy. The tartrate of antimony decomposes the blood and solids of the body most fearfully. Witness the bloody vomitings and purgings which accompany its use. It forms a compound with the albumen, rendering it insoluble. The tissue thus is broken up, and the blood rushes through the gap. To us, it is an awful remedy.

Our author confesses that "confluent smallpox, algid epidemic cholera, malignant scarlatina, and the adynamic and ataxic forms of typhus and typhoid fever, not only very frequently terminate in death, but they seem to be very little influenced, in any way, by remedial measures." Then we have another frank and large confession:

> "Our fifth group is constituted by a most formidable and appalling catalogue of diseases—having no tendency towards a favorable termination; but little or not at all under the control of remedies; and self-limited only by death. To this class belong *hydrophobia, epilepsy, traumatic tetanus, scirrhus*

and cancer, softening of the brain, tuberculous meningitis, phthisis, membranous croup, diabetes, albuminuria, and various structural lesions of the heart and other viscera. Most of these diseases are, in the present state of science, beyond the reach of medicine—some of them nearly, and others absolutely so. Amongst thousands of cases of hydrophobia, there are not half-a-dozen authentic examples of recovery; the disease has an invincible tendency towards death."

We cannot give up more space to this part of our examination: and we need not, for the asthenia of our art and science is so manifest that detail is not requisite. There is a fair claim adduced for the value of obstetrical and surgical knowledge and practice, which will be freely admitted. When once the medical department can be placed upon as sure a basis of knowledge as the obstetrical and surgical, we shall be able to claim as much respect and homage for it. But before this can be done, the facts of life must be observed with greater accuracy, and the truth of life deduced with greater certainty.

This nicety of investigation is not suited to the genius and capacity of every one. Nay, very few possess it. It requires the philosophic temperament, the nice discriminative mind, the patient, plodding, strict investigator. He must be capable of concentrating his examinative powers upon one subject, or phenomenon, for days, or weeks, or months, or years, until the problem is completely solved.

As in the study of a language each word must have its own distinctive meaning, and yet agree with all the meanings of the other words, so, in the study of our medical philosophy, each element and substance, action and phenomenon, must have its own appropriate account and use, agreeing with all other ascertained phenomena and explanations.

The author is entitled to the thanks of every man who values the profession of the art of medicine, and if, instead of calling our attention to the knowledge or the ignorance of others, he will select some branch of our extended tree of ignorance, and load it with the fruits of knowledge, he will have ampler, richer satisfaction than ever can be his by lauding practice which he knows and states to be equivocal.

Our own most humble, and, to ourselves, most humbling efforts, shall be directed to the accomplishment of something in this way. We feel the strong necessity for something being done to render ours the art distinguished by its science. It has been hitherto distinguished more for its urbanity and philanthropy, than for its exact and positive knowledge. Let a few choice and noble spirits dedicate themselves to the examination of the elements and organization of our bodies, their functions, and the effects of substances upon them. Let us not be dismayed by obstacles. We possess the Rosetta stone of animal chemistry and organization, a sufficient key for decyphering the hieroglyphics of life, health, disease and remedy. As many laborers, and as much attention given to our art as was given to Egyptian hieroglyphics, would solve the riddle of our Sphynx as well as theirs. J. H. S.

BIBLIOGRAPHICAL NOTICES.

ART. X.—*A Text-Book of Practical Anatomy.* By ROBERT HARRISON, M. D., M. R. I. A., etc., with Additions by an American Physician, with numerous Illustrations. New-York. Samuel S. & W. Wood. 1848. Large 8vo. 720 pp.

WE have another splendid publication from the press of the Messrs. Wood, those enterprising publishers, to whom the profession has been long much indebted for the publication of the Medico-Chirurgical Review, and many valuable contributions to medical science, and who merit by their courtesy and liberality, its patronage and esteem.

The work before us has been long and favorably known. It is a new edition of the well-known "Dublin Dissector," but so much enlarged, corrected, altered and improved as to be hardly recognisable under its changed name and to merit fully its present appellation of a system of Practical Human Anatomy. That many editions of its predecessor have already appeared and been exhausted, not less than the fact that it has been selected by the fluent and accomplished lecturer on anatomy in the College of Physicians and Surgeons of this city, as the text-book for his class, are sure guarantees of its excellence, and the present edition, we can assure the reader, fully sustains, nay materially enhances the distinguished reputation which it has already attained.

Save in its arrangement, it is a complete system of anatomy, for the use both of students and practitioners. This arrangement which consists in dividing it into chapters containing the anatomy of particular regions, in which, not only is every part minutely described, but the method of examining each clearly detailed, adapts it admirably to the wants of the student, when engaged in the indispensable, and if properly pursued, the agreeable, useful and instructive, but if otherwise, the disgusting, tiresome and fruitless labor of dissection. To enable him to receive from this duty, all the advantages which its proper study and this only can afford, the Bibliotheca Medica, we venture to say, presents him with no better guide. The descriptions, general, individual, and topographical, are most full, clear, and accurate. Nothing seems wanting, and on a comparison of the volume with that of Wilson, on some particular points, we have been obliged unhesitatingly, to give the palm to the work of the Dublin Anatomist. The student who, over the cadaver will follow its guidance, cannot fail to make himself thoroughly conversant with the minutest intricacies of the wonderful and complex structure of our curiously-constructed organism, and he who commits to mind the lesser half even of the minute intelligence respecting it which it contains, may rank in anatomical science almost with an Albinus or a Soemmerring. Not a little physiology and pathology is incorporated with the volume. To the practitioner who needs occasional refreshment on these particular points which in the hurry and toil of business too easily escape the memory, however firmly they may once have abided in it, will find it, we venture to assure him, by the aid of its copious index, an all-sufficient work of reference, and to either of these classes, when supplying themselves with text-books we recommend it in the strongest terms as meriting a careful and impartial examination.

It is most beautifully got up. The type is clear and excellent, the paper white and satiny; the whole appearance of the work most creditable to the source from whence it issues. If we dare "hint a fault and hesitate dislike" of so meritorious a volume, we would say that its pages are too compact, and its bulk inconvenient; but these blemishes are lost in the excellence of its object and that of its fulfilment.

The many excellent wood-cuts with which it is profusely embellished and illustrated, add greatly to a clear understanding of the text and to fix its details upon the memory, and their introduction into most of our modern text-books may be considered as one of the great improvements of our day, and one of the great advantages which the student of that day has over those who twenty years ago preceded him in his career. W. C. R.

ART. XI.—*Catalogue of Books on Medical Science for sale by the Messrs. Woods,* 261 *Pearl-street.*

WE have often in casting our eye over the well-furnished shelves of the Messrs. W.'s ample magazine, admired the extent and excellence of the vast collection of medical authorities which stand ranged upon them; but until this catalogue reached us, we had little idea of its completeness. It is indeed a magnificent bibliotheca medica, such as not an individual only, but an institution might be proud to own. The very sight is enough to make the mouth of a bibliopole water. Name but an author of repute, ancient or modern, an erudite antique lover or a modern luminary in our science, and lo, it seems to us, his learned labors are at your hand. The medical press of remote ages contributes its dingy tomes, with their versicolor pages, and their quaint embellishments; while the more exquisite productions of modern art, gorgeous with coloring, rivalling nature in fidelity and imparting to the hideous deformity of disease, the luxurious beauty of a finely-painted posy, and divesting sin of her horrors, and pathology of her distastes, by the admirable application of the pictorial art, lie in profusion before us. There rest their classic dust too often, alas! undisturbed, the graphic tomes of the good old Aretæus and Eginetus, of the "divine old man of Cos," of the elegant Celsus, and of the countless host of ancient medical celebrities down to the middle ages. Next follow their successors, passing, pari passu, in review in the bright pageant, and with not less zeal, and greater success, contributing their valuable researches in the etiology and cure of disease; and lastly, the standard treatises of our own day are there, to post up the gathered lore of former days, and to complete (as far as the science, forward, progressive, improving and improved and mightily enlightened, yet still defective, by virtue of its mysteriousness, will allow,) their history to the present day. Such a collection we suspect is rarely to be found on the shelves of a bookseller, or out of the halls of some venerable institution, whose care and office it is to treasure and arrange, to protect from adverse blasts, these sybilline leaves of the inspired oracles of our profession.

We entreat the physician, who is engaged in the delightful task of selecting a library, in whose sweet solitude he may silently commune with the great spirits of the past and present, and luxuriate in the proofs of the zeal which has ever been shown in behalf of suffering humanity by his gifted brethren in the good cause; we entreat the student who is laying slowly up the scanty store upon whose utility his hopes of a more exclusive collection at some later day are to be built, and who seeks now only to possess himself of that solid basis of knowledge which will suffice to indoctrinate him into the actual practical duties of his calling, to visit the store of the Messrs. Wood. The one will find there all that can complete and dignify his collection; the other, all that is needed to supply his more modest wants and answer for his more imperative necessities.

The supply of foreign books is remarkably extensive; those of the French school especially, and the beauties of Cruveilhier, of Bourgeny, of Bowin, of Cazenave, of Rayer, display at every turn their tempting charms, their captivating beauties; the blended triumphs of science and of art. The collection, we repeat, is an unusually fine one and deserves inspection. It does credit to the liberality of those who have assembled so vast a stock of the standard literature of the profession, regardless of expense, and who are willing to dispose of it at prices so much reduced and so truly reasonable; it is important to be known that such a Thesaurus exists in our midst; and he who lacks some classic tome in his series, to illustrate, in chronological progression, the history of some scientfic subject, and complete the order of its investigators, can scarcely be deemed unfortunate or excusable, until he has sought for it here in vain.

W. C. R.

Art. XII.—*A System of Clinical Medicine.* By Robert James Graves, M. D., M. R. I. A., one of the Physicians of the Meath Hospital and County of Dublin Infirmary; formerly Professor of the Institutes of Medicine; Honorary Corresponding Member of the Royal Medical Society of Berlin, the Imperial Medical Society of Vienna, and of the Medico-Chirurgical Societies of Hamburgh, Tubingen, Bruges, Montreal, &c., &c. *With Notes and a Series of Lectures.* By W. W. Gerhard, M. D., Lecturer on Clinical Medicine to the University of Pennsylvania; one of the Physicians to the Pennsylvania Hospital, &c., &c., &c. Third American edition. Philadelphia: Edward Barrington & George D. Haswell. 1848. 8vo. pp. 751.

This is a new and much improved edition of a very valuable work—a work not only favorably received in this country, but translations of which have appeared in the French, German and Italian languages. The edition before us comprises forty-six lectures by Dr. Graves and fifteen by Dr. Gerhard to which are added notes on the typhoid and typhus fever of 1848. Dr. Graves has thoroughly revised in this edition the whole of the former published lectures, and in doing so he claims to have "rigorously excluded every assertion and conclusion which his subsequent experience has not verified." A goodly proportion of the work is taken up with observations on fevers. The lectures on typhus in this edition have assumed an entirely new form, all the author has heretofore published has here been not only remodeled and condensed, but much new matter has been added in order to form as far as possible "a continuous and connected series of reasoning on this disease." A new introductory lecture, containing strictures on the physiological and pathological Theories founded on Liebig's chemical researches, appears in this edition for the first time, and is well worthy of the perusal of the profession. We regret that several detached essays contained in the last Dublin edition, of which this is a reprint, were not published in the present one, they would have added much to the value of the work at the present time. We are pleased to learn that the publishers have announced their intention soon to issue them in a separate form. The value of the work, we need hardly add, is greatly increased by the numerous additions made by the author and editor to the present edition, a portion of which we have only mentioned in the above short notice. The typographical execution of the work is good.

Art. XIII.—*Essays on Infant Therapeutics: to which are added Observations on Ergot and an Account of the Origin of the Use of Mercury in Inflammatory Complaints.* By John B. Beck, M. D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the University of the State of New-York; Corresponding Member of the Royal Academy of Medicine of Paris; Corresponding Member of the Medical Society of London; one of the Vice Presidents of the Academy of Medicine of New-York, etc., etc. New-York: W. E. Dean. 1849. 12mo. pp. 117.

We are much pleased to see the essays which compose this volume appear in a distinct form. It will be remembered that they all first made their appearance before the profession in the periodical medical press; many of them in this Journal; and so far as our limited acquaintance with the periodical press will admit of our forming an opinion, we hesitate not to say that there never, in the history of medical literature in this country, has been a series of essays which have commanded more attention and been so extensively republished as these. And need we say that they are deserving of so much notice and attention? We would gladly see in the hands of every young practitioner of our extended country, a copy of this little work. A careful perusal and observance of the instructions contained in it would, we doubt not, save many an anxious doubt at the bed-side of the infant sufferer. The work contains seven essays in all, viz.: I. On the Effects of Opium on the Young Subject; II. On the Effects of Emetics on the Young Subject; III. On the Effects of Mercury on the Young Subject; IV. On the Effects of Blisters on the Young Subject; V. On the Effects of Bloodletting on the Young Subject; VI. Observations on Ergot; VII. An Account of the Origin of the Use of Mercury in Inflammatory Complaints. The sixth and seventh essays are valuable in more than one point of view. They present a careful and accurate, and up to the time they were written, a full digest of the literature of our own country on these subjects. And the last not only claims, but establishes beyond dispute, for our country, the priority of the introduction and use of Mercury in Inflammatory Complaints. We commend these essays to the particular attention of the profession.

Art. XIV.—*Medical Lexicon of Modern Terminology; being a complete Vocabulary of Definitions, including all the Technical Terms employed by Writers and Teachers of Medical Science at the present day, and comprising several hundreds of words not found in any other Dictionary. Designed for the use of Students and Practitioners. Second edition, greatly enlarged.* By D. Meredith Reese, M. D, LL. D., Resident Physician of Bellevue Hospital, N. Y., Editor of Cooper's Surgical Dictionary, etc. New-York: Samuel S. & Wm. Wood. 1848. 18mo. pp. 240.

This little volume first made its appearance in 1844. It claims only to be a pocket lexicon, designed principally for the use of students. It is well adapted to the end designed, for it is universally conceded that the novice in medicine needs, in the matter of a lexicon, a short and concise definition, one that will in as few words as possible give the meaning, and that too divested of all confusion. Such a work we believe to be the one before us. We cheerfully recommend it to the attention of medical students as they commence their professional studies. This edition is considerably enlarged, corrected and improved; the typographical execution is good.

Art. XV.—*Man and his Motives.* By George Moore, M. D., Member of the Royal College of Physicians, London, etc.; Author of "The Power of the Soul over the Body," "The Use of the Body in Relation to the Mind," etc. New-York: Harper & Brothers. 16mo. pp. 301. 1848.

This work, the author informs us, "was designed, in connexion with two others, 'The Power of the Soul over the Body in relation to Health and Morals,' and 'The Use of the Body in relation to the Mind.'" It has no direct bearing upon medical science, the tone of the work being more particularly religious. The style is simple and perspicuous. While we respect the spirit that leads to the making of such books, their character will not allow us to give them an extended analysis in our pages. The typographical execution of the work is neat, and we have no doubt that it will meet with a ready sale. E.

Art. XVI.—*The Breed, Management, Structure and Diseases of the Sheep.* By Henry J. Canfield. Salem: Ohio. 1848.

As every thing relating to the health of the human family is connected with our profession, the management of an animal forming an important article of diet, eminently deserves its notice. Diseases may be communicated from one animal to another. Thus, smallpox may be transferred from man to the cow, and retransferred to man in a modified form; glanders is communicated to the human subject from the horse, and hydrophobia from the dog: the entozoa from measled pork have been found in the human brain, and were the cause of apoplexy. Even the diseases of vegetables produce diseases in animals. After the appearance of the potato disease there was great mortality among horses. A case has been lately related, where a man died in consequence of having the virus of a diseased potato absorbed by an abraded surface on one of his hands. The blight in rye produces dry gangrene. Dr. Fell, of this city, lately met with a variety of tinea of scalp, face, and neck, caused by insects from the leaves of the paper-mulberry. Illustrations of the transference of disease might be multiplied, but enough has been stated to establish the fact.

If tubercle can be propagated by contact, as Laennec and other pathologists believe, the eating of unhealthy mutton may be a cause of consumption, for he who eats diseased mutton stands a fair chance of being infected. The comparative immunity of the Israelites from pulmonary complaints, may be ascribed to the strict examination as to the healthy condition of the animal before it is allowed to be eaten. If the slaughter-houses were all in one place, and a similar custom of inspection were adopted, many valuable lives would be preserved, as no one can tell the individual for whom the poison of a diseased carcass is destined.

The author is not of our profession, yet he evinces an intimate knowledge of its elements; and although we do not agree with all his theories, we believe they are generally correct. The fact that, in a neighborhood where many of the sheep die of the rot, and other diseases, he possesses a flock of upwards of three hundred in fine health, is sufficient proof of his practical skill.

The remedies employed for sheep are not dissimilar to those made use of in the treatment of man, although several of them appear singular at first sight. Thus, in some of the diseases, after the administration of a purgative, a mixture of equal quantities of gypsum, chalk, and common salt, is recommended as a deobstruent. By decomposition in the stomach, these ingredients yield the solutio-muriatis calcis, which was so often prescribed for tuberculous affections before the introduction of iodine. It would be troublesome to make a sheep take a bitter solution, but prepared in the above manner and mixed with its food, the medicine is taken without difficulty.

Whitlaw, who has paid much attention to the diseases of cattle, asserts that a mixture of salt and lime sprinkled on the soil, will not only destroy voided entoza which may be seen creeping on the grass, but will also prevent the formation of noxious weeds.

The prevention of the potato disease would be a blessing to millions. The dissemination of the means of obtaining healthy instead of diseased mutton, and thereby diminishing the generation of disease, is truly a work of philanthropy. W.

PART THIRD.

EDITORIAL

AND

AMERICAN MEDICAL RETROSPECT.

Progress of Cholera in America.—This disease, which has been gradually extending westward over Europe, has at last appeared on this side of the Atlantic. The ship New-York left Havre on the 9th of Nov. last, with 21 cabin and 331 steerage passengers, and a crew of 33—making in all 385 persons on board. The steerage passengers were part Germans, from different parts of Germany, and the rest from Paris and its vicinity.

There was no cholera either in Paris or Havre, when the ship left the latter port; and the passengers were healthy. They made a prosperous voyage, and remained in good health, until they had been 16 days at sea, and had arrived near the American coast, in latitude 42° north, and longitude 61° west, when one of the steerage passengers was taken sick with a severe bowel complaint. The next day several others sickened, and the same thing continued to occur each succeeding day until their arrival in this harbor; at which time eight or ten were found sick with true cholera, and removed to the quarantine buildings, and nearly an equal number had died on board. The ship was placed in quarantine, and the steerage passengers lodged in the quarantine store-houses. They arrived at the quarantine December 4, and the disease continued to prevail among the passengers, at the rate of three or four new cases daily, until the 9th, when no new cases appeared until the 11th. It then reäppeared, and in a short time left the passengers from the New-York, and began to prevail in the Marine Hospital, with which those from on board the ship had had no communication whatever. We have seen two or three statements, apparently reliable, affirming that among the passengers on board the ship, those only were affected who came from Paris and its vicinity. In a few days after the disease appeared at the quarantine, an individual coming from that place, stopped at a German emigrant house at the corner of Cedar and Greenwich streets, and being attacked with the disease, was carried directly back, and died in a few hours. On the 11th December, several days after, another case occurred in the same house in Greenwich-street, which was *excessively filthy*, and crowded with upwards of 200 emigrant lodgers. This also died in little more than 24 hours. No more cases occurred in the city until the 20th, when a German, who had been twelve or eighteen months in this country, and who had only a few days previous come to this city, for the purpose of taking passage back to Europe, and who had had no connection whatever, either with the house in Greenwich-street, the ship New-York, or the quarantine, was attacked at the house No. 161, Washington-street, and soon died. Since this, no new cases have occurred in this city. The whole number of cases which have been reported from the quarantine, by the Health Officer, and by the Resident Physician, up to this time, January 1, 1849, is 91, and the whole number of deaths 47. These figures may not be exactly correct, but they are nearly so. On the 16th of December, five cases of cholera were reported to have occurred at New-Orleans, in connection with the ship Swanton, and although the Board of Health of that city declares these cases to be only an aggravated form of common cholera-morbus, yet the disease rapidly extended in the city, where nearly 80 cases had occurred by the 21st. And the despatches by telegraph show that it continues to spread in an alarming manner; no less than 100 new cases being reported for the 25th, and between 30 and 40 deaths. These accounts may be exaggerated, but it is evident that the disease, in a severe and epidemic form, has commenced its ravages in the South-west—where the weather has been unusually warm and wet. Such is the simple narration of facts, as near as we can gather them, concerning this third appearance of the cholera on this continent.

COMMUNICATION.

New-York, October 29, 1848.

To the Editor of the New-York Journal of Medicine:

Sir,—The regular and steady progress which the cholera is making over its former field of action in Europe, renders it almost morally certain that it will, in the course of a few months, perhaps sooner, once more bring desolation to our shores.

The public journals of the country, copying those of Europe where the disease is prevailing, have given rules for avoiding all exciting causes, as well as for taking the necessary curative means until the physician arrives. This is all very proper, and if the rules be duly observed a vast amount of disease, suffering and death will, under the blessing of God, be averted.

But there is another and most important view of the case, to which I beg to direct your observation. The old adage, that prevention is better than cure, was never more applicable than in cholera; and although much can be done towards prevention, even in the most severely affected districts, still the most effectual mode of prevention is to remove from the sphere of its action altogether. The sporadic tendency of cholera, that is to say, its disposition to visit one place with enormous severity and to pass by others almost harmlessly, is well known, and has produced much comment and given rise to much speculation. The mystery will, however, in a great degree vanish if we study the localities where such phenomena appear. The substrata of various places have at no time, I think, been sufficiently investigated by the profession, not only in reference to cholera but to other diseases of depression. Clayey soils, rich, strong loams, alluvial flats, and the vicinity of rivers and lakes are remarkable for developing all these affections; while the gravelly, sandy, chalky, and dry soils of all kinds, are equally remarkable for their exemption from them. Thus, for instance, the hilly and gravelly country at and near Lebanon Springs, escaped the cholera altogether on its former visit to this country. So also did the sandy district of Monmouth county, New-Jersey. The same was observed in many parts of England. The valley of the Axe, for instance, felt not the ravages either of cholera or influenza, and this was ascribed to the dry and chalky soil of the region.

We know too little of the nature of these diseases, as well, indeed, of all atmospheric affections, to explain these phenomena satisfactorily; it is enough for our present inquiry to know that cholera and influenza are most prevalent and most fatal in low and damp situations. A damp and impure atmosphere is the most prolific medium for disseminating these peculiar contagions, which have so long baffled the investigations of the medical profession in all countries.

I have already adverted to the superiority of *prevention* over that of *cure*, and intimated that the most effectual mode of prevention was to remove entire from the field of infection when that is possible. Thousands of persons, I am sufficiently aware, must remain in the cities and be content to meet the result, be it what it may; but, nevertheless, many can remove, especially if a convenient place be found which is easily accessible, and where the expense of living is not great. Such a place I have discovered in New Jersey. The village of Middletown Point, and its vicinity, which can be reached in a couple of hours, by taking the steamboat to Keyport, is a place which may be regarded as one of safety. It is a sandy district of several miles extent, with an atmosphere as salubrious as any in the world. The soil is so porous that wet feet rarely occur to the pedestrian. Pulmonic and bronchial affections are speedily relieved there by the mere influence of the atmosphere alone. Intermittent rarely happens, and the cholera was unknown there—the premonitory symptoms not even appearing. It is an excellent winter climate, for this latitude, for all those suffering under affections of the throat and lungs, or the bowels, and in short, the mucous membranes generally. The remarkable purity and dryness of the air of this place is accounted for when we consider the sandy and consequently porous nature of the soil, and bear in mind that being a few miles distant from the sea it is not exposed to the damp and harsh winds coming in from the Atlantic, which are so distressing to many invalids who reside nearer the margin of the ocean.

I am, Sir, etc., J. S. Bartlett, M. D.

New-York, December 22, 1848.

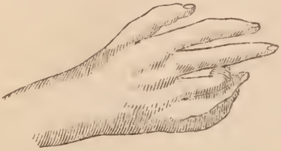
To the Editor of the New-York Journal of Medicine:

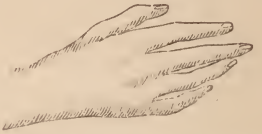
Dear Sir,—Since I furnished you my "Extracts," containing a case of "Chorea induced by Deformity," and detailing the operation upon the feet, I have completed the case by removing the extra finger, and have just made a drawing of the improved hand, which, with a representation of the deformed hand, I forward to you, which please insert with the original article, if it has not already gone to press.

I removed the extra finger under the influence of chloroform, on the 13th, and have this morning made the enclosed drawing. The wound has all united by first intention; the hand looks quite respectable, and the girl is in perfect health.

Yours respectfully,

LEWIS A. SAYRE.





[The above having been received too late for insertion in its proper place, we therefore publish it in the editorial department.—*Ed. N. Y. Jour. Med.*]

PATHOLOGY AND PRACTICAL MEDICINE.

TYPHOID FEVER. By Prof. J. P. HARRISON. (*Western Lancet.*) [The following conclusions which are contained in a late Clinical lecture, by the author of "Elements of Materia Medica and Therapeutics," do not accord with the generally-received opinions of the profession at the present time. We give them that our readers may have both sides of the question. By doing so, we do not intend for a moment to question the identity of typhus and typhoid fever.—ED. *N. Y. Jour. Med.*]

The absolute diagnosis of typhoid fever we hold to be, at present, exceedingly difficult of statement, because it involves the whole question of fever, a matter yet admitting of infinite debate, and because of the disputed individuality of the disease. We deem it best, therefore, explicitly and at once, to state that all we know on the subject may be summarily thus announced; which may be stated in ten propositions.

First.—That typhoid is a distinctive form or variety of fever.

Second.—That it bears a close affinity, or resemblance to the typhoid stage of our common bilious remittent, and also to ordinary typhus fever.

Third.—That typhoid fever, whilst it resembles the above forms of morbid affection in the lesions of innervation, of secretion and excretion, and of the general circulation, differs from both in the less degree of stupor, and adynamia, as well as in the eruptions, and in the organic alterations which obtain.

Fourth.—That typhoid fever is not, in any degree, contagious. The same proposition may be laid down in reference to typhus, which, under free ventilation and cleanliness, is never propagable by any specific emanation from the sick. This cannot be said of any decided contagious disease; smallpox and measles are propagable under the most favorable circumstances of personal cleanliness, and of a free perflation of pure air.

Fifth.—Typhoid fever may arise from a certain impurity of air, either engendered by deficient ventilation, or induced by a peculiar miasm belonging to a certain locality.

Sixth.—That the disease is divisable into four forms.

1. The mild, in which but slight disturbance obtains, either in the nervous, vascular, or secretory systems, and in which there is no local lesion of the digestive tube.

2. The local form, in which there is scarcely any perceptible constitutional disorder, but in which a destructive action is going on in the intestinal canal.

3. The grave form, in which there are profound lesions of innervation, of circulation, of secretion and excretion, and of Peyer's glands, unaccompanied by lenticular spots; and

4. The severe eruptive form, in which we have, either partial or very extensive rose-colored spots, accompanied by grave constitutional lesions.

In this form there may not always coëxist profound lesion of the alimentary tube.

Seventh.—That the severity of the attack bears no direct, or appreciable relation to the number, or extent of the eruptions. Nor can the converse proposition be maintained that the lenity of the seizure is marked by the profusion of the lenticular spots.

Eighth.—That typhoid fever is a constitutional disease; not dependent upon the local state of the bowels, and having no essential affinity to an exanthem.

Ninth.—That there is no demonstrable condition of the blood that will solve in the slightest degree, the problem of the rise, progress and termination of typhoid fever. There is no justifiable ground for such hæmatological speculations as some have most gratuitously indulged in, respecting the nature of typhoid fever. Neither the symptoms nor the morbid anatomy justify any inference that the blood is vitiated by any foreign impregnations, nor in any way altered, except in a consecutive manner, from the febrile condition, and from the local lesions, in this affection.

Tenth.—That there does not exist any tendency in typhoid fever to assume critical days—or to issue by any determinate mode, in convalescence. On the other hand, it is a fever of very indefinite duration—tedious, protracted, and uncertain in its termination.

CASE OF HYDROPHOBIA TREATED WITH CHLOROFORM. By H. HARTSHORNE, M. D. (*Amer. Jour. Med. Sci., for Oct.*) The boy was thirteen years old. Was taken sick about six weeks after being bitten by a dog proved to behave as if rabid. Had high fever, which had no remission, and yet no characteristics of typhus or typhoid fever; he was not deaf; had no tympanitis; no petechiæ; but had throughout, excessive sensibility to impressions, particularly those of cold, and about the face; had a difficulty, at times incapability, of swallowing, caused by a spasm which made a violent respiration simultaneous with the attempt to swallow, and thus impeded the latter and endangered the passage of liquid into the windpipe; which symptom was constant, and belongs to no ordinary type of disease; had injections of laudanum, ʒss. or ʒj., repeated again and again with no effect: and breathed chloroform for hours, with only short intermissions, with no more effect than to tranquillize him, and produce natural sleep, from which he was, once at least, roused by a return of wild delirium: and yet had no sign whatever of tetanus: no possibility of mania-a-potu: and very little, and only occasional complaint of pain: which pain, when it occurred, except in the first stage, was in the arm which had been bitten by the dog; had also salivation, constant watering of the eyes, and finally vomiting: and whose delirium was, until quelled, of a malicious and furious character, or one of dread, horror and distress: ending fatally at the end of the seventh day.

ACCOUNT OF SEVERAL PERSONS STRUCK BY LIGHTNING, AND THE MEANS ADOPTED TO RESUSITATE THEM. By R. L. WARREN, M. D. (*South. Med. and Surg. Jour.*) On the third day of September, 1848, in the town of F——, there were five ladies and one negress "*struck with lightning*." These persons had attended church in the village, and were on their return home in the evening, when there arose a tremendous thunder-cloud which induced them to go into the house of one of the citizens for protection from the rain. The lightning was intensely vivid. These females, from a great fear of "*being struck*," had scarcely huddled together on a bed in a room, near which stood a very tall oak tree, before it received the electric charge. Accompanying it was an explosion which resulted in completely prostrating the entire crowd.

I was immediately summoned to the spot. I immediately ordered large quantities of cold water to be thrown on their heads and in their faces, and, as soon as it could be procured, the vapor of *ammoniated alcohol* to be applied to the nostrils, which remedies had the happy effect of producing immediate resuscitation. I did not order cold water to be sprinkled on the face, but rather that "*pails-full*" should be thrown on the face and entire person—in short, the *cold douche* was prescribed. It appears that sprinkling had proven ineffectual previous to my arrival, which circumstance induced me to try the remedy in a more wholesale manner. All the patients the next morning were fully recovered from the shock, and were laboring under very little excitement, not more than might have been expected from the contusions produced by the pieces of timber that were shattered off from the walls of the house, and the incised wounds produced from the broken fragments of a large mirror that was suspended against the wall. (I might have mentioned that a large dog which lay on a large root of the tree under the house, with a block and chain fastened to him, was killed.) After the patients were resuscitated, tinct. opii was administered in anodyne doses, to allay excitement and irritability. Some of the patients were actually burned by the electric explosion. Whenever the fluid came in contact with a bad conductor a severely burnt spot was left; for instance, where the clothes were moistened by perspiration, and came in contact with the body, a burnt abrasion was left. One of the young ladies, who had a *gold* locket about her neck, was severely burned on her breast by its being dissolved. The negress had opened the window, and was standing facing the tree, perhaps not more than four feet from it—she was resuscitated with much more difficulty than any of the others; her shoulders, arms, forearms, sides, thighs and legs, were very nearly denuded.

All the patients, after reviving, complained of severe pain in the stomach; it was of a spasmodic nature, and was relieved by the anodyne treatment above mentioned.

The tree and the house were very much injured by the electricity.

HYDATIDS OF THE WRIST AND HAND. By D. A. ARTER, M. D. (*Western Lancet.*) D. A. Arter, aged 28, free from scrofulous constitution, whilst dissecting a subject, dead from phthisis pulmonalis, in the winter of '41–2, inflicted a small wound in the joint of the thumb, which produced active inflammation of thewhole of one of the superior extremities, extending to the chest, which nearly proved fatal.

The disease was finally controlled and confined to the hand and wrist. About two and a half years ago a tumor or enlargement of the theca of the flexor muscle of the small finger made its appearance, commencing in the palm of the hand and extending under the annular ligament up the forearm, some eight inches in length. There was no discoloration of the integuments, the tumor was entirely indolent and gave a loud crepitant noise upon pressure.

Its contents could be readily pushed either backwards or forwards, so that one-half of the tumor would remain empty for a short time. The theca burst about six months ago, and formed a small orifice below the annular ligament, and discharged two hundred hydatids, with some three or four ounces of inodorous serum.

The hydatids were of all shapes and sizes. They were soft, elastic, of a milk-white color, and retained their size when compressed. Since the discharge of these bodies, the hand and wrist have become comparatively well.

CASE OF SEPARATION OF THE STOMACH FROM THE ŒSOPHAGUS.—By THOMAS M. FLINT. (*Med. Exam.*)

Prof. Dunglison.

Dear Sir:—By your request I furnish you the particulars of the case in which softening of the stomach was found to have occurred. The attending physician, who is a respectable graduate of this school, has given me the following statement of facts: "The patient was a male child; aged seven years; sick about three weeks; symptoms of worms were prominent—one was passed; cerebral symptoms followed, which terminated in death. Coma and unconsciousness were prominent symptoms for ten days previous to death. When roused from this state he would eat a small quantity of gruel. He was treated for worms and cerebral symptoms."

On the 4th inst., thirty-six hours after death, I opened the body in the presence of the attending physician and a member of this class. We carefully examined the intestines, beginning at the rectum and tracing the tube up to the connection of the duodenum with the stomach, without meeting with a worm of any kind: but noticed marked inflammation of the small intestines. We next directed our attention to the stomach itself, which, to our surprise, was found to be severed from its connection with the œsophagus, and its contents, a dark-brownish mucilaginous-like fluid, poured out into the cavity of the abdomen to the left of the spinal column. We were not prepared to meet with a lesion of this character, and could account for it only by the action of the gastric acids producing *ramollissement* of this organ after death. In this opinion we were confirmed by the appearance of the liver; for beside evident marks of acute inflammation the inferior edge of the left lobe, which had been in contact with the gastric fluid, was corroded and corrugated.

That you may have the opportunity of examining the case, I herewith deliver to you the stomach and liver taken from the patient at the post-mortem.

NATURE AND SEAT OF CHOLERA.—By Prof. LAWSON. (*Western Lancet.*) Without attempting to be very precise on this branch of the subject, we feel strongly inclined to believe that the disease under consideration is more nearly allied in pathology to certain forms of *fever*, than to the class of *cholera*. This opinion is by no means new; it has been advocated by several medical writers; and indeed it was one of the earliest opinions expressed by those who carefully investigated the subject. The able report on cholera, as it appeared at Bombay, in 1819, directed attention to the symptoms of *congestive typhus* as described by Dr. Armstrong, and adds, that there is not only a striking analogy between the first symptoms of that form of fever and those of cholera, but that the same remedies are applicable to both. Some have compared so-called cholera to malignant intermittent fever; and there seems, indeed, some ground for such a comparison, at least so far as the *congestion* is concerned. There is probably no positive evidence, however, to prove that the disease takes on distinctly either the remittent or intermittent types of fever; all that we now contend for is, the relationship between a congestive form of fever, and cholera; and whether that congestive form of fever does or does not manifest periodicity, is quite immaterial in the discussion of the question before us. A close examination will reveal a very striking analogy between the more prominent symptoms of cholera, and those which characterize some forms of congestive fever; and this analogy holds good not only in relation to the primary congestive stage, but it is equally manifest in the phenomena of reaction, when that condition is established. In confirmation of this opinion, we need only refer to the symptoms characterizing severe forms of congestive fever;

such as coldness of the extremities and surface; failure of the circulation and animal heat; vomiting and purging; sometimes spasms. Indeed, so nearly do these symptoms correspond in their outline, that a description of the one might, in many instances, be applied to the other. But what we especially desire to enforce in this connection is, that the general symptoms of the two forms of disease bear such a remarkable resemblance, that we are justified in regarding them as partaking more or less of the same natures; and consequently, that the disease called cholera does not really belong to that class, but is in truth more nearly allied to the class of fevers than to cholera.

This view of the nature of cholera is important, not only in a pathological sense, but also in its relation to treatment; for so long as the attention is directed exclusively to the alimentary canal as the absolute seat of the disease, so long will our remedial agents be addressed to the same organs; and thus, by a partial and incorrect consideration of the seat of the morbid action, the state of the general system is entirely overlooked, and the true nature of the disease mistaken, and remedial agents improperly employed.

SURGERY.

Case of Congenital Glossocele, or Hypertrophied Tongue.—By M. G. Delancey, M. D., U. S. N. (*Amer. Jour. Med. Sci.*) Miss Sarah Fernald, aged twenty, a native of Kittery Point, Maine, was born with her tongue protruding from her mouth. It had literally grown with her growth, and strengthened with her strength, until it became a constant nuisance to herself and a disgusting sight to the beholder. She is a finely formed, sprightly and intelligent girl; has never had any disease save this of the tongue, and a scrofulous ulcer of the submaxillary gland, which discharged for some time and then healed spontaneously. The legend her mother relates is, that when some seven months advanced with this child, she longed for pomegranates, which she had never seen except in a picture, and which desire continued with her till the birth of Sarah. Irreconcilable as it is with common reasoning, and incomprehensible, according to our present knowledge of the power of the mother's mind over the fœtus in utero, yet we cannot deny the fact, that strange impressions are made through the medium of the mother's fancy upon the unborn infant. The tongue of Sarah did, through infancy, and until amputation, retain the appearance of an open pomegranate,—the enlarged and diseased papillæ closely resembling the seeds of that fruit. I was requested to examine the case, with reference to the feasibility of an operation. I found, as I have described, a handsome, intelligent girl, with a tongue protruding (from upper teeth to apex) a little over four inches, circumference seven inches, and thickness at middle of tongue two inches—indeed the tongue was of nearly the same thickness from root to apex. A deep linear fissure occupied the dorsum of the tongue in its whole length. The protruded portion was quite dark, owing to the number of vesicles filled with blood; and the part in the cavity of the mouth was also covered with these vesicles, and enlarged papillæ, but in a lesser degree. The substance of the tongue was extremely hard, and scarcely susceptible of pain; and was constantly pouring out a profuse, viscid, and offensive exudation. The tongue could not be retained in the mouth except for a moment; as its intrusion filled the whole cavity of the fauces, and prevented respiration.

The inferior maxillary bone was natural in form, except at the symphysis, where the incisors and canine teeth were separated half an inch, and inclined outwards by the constant pressure and weight of the tongue. The lower teeth were covered with tartar, and rather loose in their sockets, and the lower lip everted on the chin.

She had never been able to masticate with her tongue in the mouth, and consequently lived mostly upon fluids. She was subject to painful periodical swellings of the tongue, every six weeks or two months, during which time she would almost reach the point of starvation, from absolute impossibility to swallow any nourishment for a number of days. During these periodical turns (which had no connection with the menstrual discharge, the latter being always regular) profuse hemorrhage would sometimes take place from the tongue, which at these times looked, as she expressed it, as black as my hat. She could make herself understood, though her words were very thick, and given with a lisping utterance. My advice was requested in this painful case, with the promise that it would be acceded to in all things. I was prepared for such a contingency, by a knowledge of the operation, and success of my former preceptor, Dr. Thos. Harris of the U. S. Navy, now chief of the Bureau of Medicine and Surgery, Washington. A description, with a plate of Dr. Harris' case, may be found in the seventh volume of the *American Journal of the Medical Sciences*, Oct. number, 1830.* The similarity in both cases is remarkable; the principal difference exists in the one being a congenital disease, the other not. The plate of Dr. Harris completely represents the tongue of my patient, save the tartaric deposit: in other respects they are alike;—with a balance in favor of Miss Fernald on the score of youth and beauty.

I decided upon amputation, recollecting the difficulties Dr. Harris encountered, in his attempt at strangulation by ligature, and his failure so to do. Also, his urgent advice to avoid, by amputation, a painful and fruitless proceeding.

On the 30th of May last, assisted by Dr. Oliver, of Portsmouth, I operated in the following manner:—The patient being seated in a chair, her head supported by one assistant, and hands secured by others, I forcibly drew the tongue outwards and downwards by a strong forceps, commenced a ∧ incision with a bistoury on the left side, carried it to the median line a little inside of the upper incisors, turned and cut outwards.

Thus, with two strokes excising the part, which was of great density and hardness. A formidable jet of blood immediately issued from the dorsal and ranine arteries, which were, of course, preternaturally enlarged.

I tried to control the hemorrhage by torsion, which failed, as the arteries were so impacted in the surrounding substance that I could not draw them out. Compression was quite as unsuccessful; dossils of lint, wetted with iced alum water, were no better, and so I proceeded to tie the dorsal and ranine arteries, which I did without trouble, and thus effectually stopped the hemorrhage.

The patient all this time suffered so little pain, that the moment the arteries were secured she jumped up and ran to the mirror to see the effect of the operation. The ligatures were cut off close to the knot, hoping that in their course outward the suppuration might tend to lessen the great thickness of the tongue.

The flaps were now brought together, (the coagula having been carefully removed with iced alum water,) and secured with four interrupted sutures. When this was done, the tongue was of good shape, and no point of cut surface remained exposed. Length of tongue removed, two inches and three-quarters. For nine hours after the operation the tongue remained within the mouth; inflammation and swelling then set in and protruded it. The only dressing applied was a dossil of lint, wetted with ice-water. There was no secondary hemorrhage. On the sixth day three of the sutures were removed, and on the twentieth, complete union had taken place by the first intention. The turn of periodical inflammation had come round by this time, and the tongue became slightly swollen, and the submaxillary gland of the left side very much so. The application of half a dozen leeches with saline purging quickly subdued this attack. The patient had been put upon the tinct. of iodine, and it was continued with benefit.

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* On the 26th of May, 1835, another operation, similar to the one here mentioned, was performed by Dr. Harris upon the tongue of a young man, aged nineteen, from Tennessee, who had been induced to apply for relief, from having heard of the success of the first case. In this patient, the enlargement was congenital;—the tongue projected beyond the upper incisors, three inches—circumference six inches—vertical thickness, one inch and a half—of a violet color, hard and incompressible consistence, and covered with a dark slimy secretion. The deformity was so great, that he was obliged to wear constantly a silk handkerchief over his mouth, and around his neck.

The result of the operation was complete; and the gentleman subsequently became a practitioner of medicine, in his native state. The details of this case, with descriptive plate, may be found in vol. 20th, *American Journal of the Medical Sciences*, 1837.

On the 5th inst., Miss Fernald, for the first time in her life, chewed with the tongue in the mouth. It is now kept within the teeth, like any normal tongue, and protruded with slight difficulty. The exudation is very trifling—not sufficient to afford the slightest inconvenience, and altogether deprived of unpleasant odor. On the 10th inst. I had occasion to remove the lower incisor teeth, their horizontal projection having caused ulcers in the lower lip, which has now assumed its natural position, and completely closes the mouth. On the 25th of July Miss Fernald paid me a visit at the Navy Yard, and I take pleasure in saying, that a more comely looking girl, or one better pleased with her own altered condition, can rarely be found.

The fear of hemorrhage has deterred surgeons from amputating any considerable portion of the tongue. The recorded case of Dr. Harris, and the present one, are the only operations of the kind that I have any knowledge of, in the United States.

The tongue may be operated upon with as much safety as any other organ in the body, and its great vascularity ensures a more speedy union. But no operation by ligature should be attempted. The knife alone is to be relied upon, and the arteries being secured, and parts adjusted, as in the ∧ incision, very little need be feared from secondary hemorrhage.

New Operation for the Radical Cure of Varicocele.—By Prof. S. D. Gross. (*Amer. Jour. Med. Sci.*) The following operation for the radical cure of varicocele I have performed eight times within the last few years. The patients were all young men of good constitution, and they all recovered without a single bad symptom. The cure, so far as I have been able to learn, promises to be permanent in every instance.

During the operation the patient may lie down, sit in a chair, or stand up, as may be most convenient. The scrotum, previously divested of hair, is rendered tense by grasping it behind with the left hand. A vertical incision, scarcely an inch in length, is made over the anterior part of the tumor, down to the enlarged veins, which are next carefully isolated from the accompanying duct, artery, and nerves, by a few touches with the point of the scalpel. This constitutes the first step of the operation. The second consists in passing a short, thick sewing needle—a No. 1 of the milliner, underneath two or three of the larger trunks, and winding around it a stout thread, either elliptically, or in the form of the figure 8. The ligature is drawn with great firmness, so as to indent the coats of the vessels, and put an immediate stop to the circulation. The operation is finished by closing the wound carefully with one or two sutures, or a few strips of court-plaster. The patient is now put to bed, the scrotum is supported with a silk handkerchief, and light diet is enjoined. At the end of twenty-four, or, at most, thirty-six hours, the blood in the constricted veins is sufficiently coagulated to justify their division and the removal of the needle. This is readily effected by insinuating a narrow, sharp-pointed bistoury underneath the vessels, with its back towards the needle.

Should symptoms of inflammation arise after the operation; or, in other words, should the parts become red, tender, and swollen, recourse must be had to antiphlogistics, and to the application of cold water, or solutions of acetate of lead and opium. The patient may usually sit up in five or six days, and in a few more he may be permitted to walk about. The little wound soon cicatrizes; and the induration, caused by the coagulation of the blood between the testis and the seat of the constriction, gradually disappears by absorption. The period required for this rarely exceeds a month.

The advantages of the above operation are, first, its perfect simplicity and the facility with which it may be executed; secondly, its freedom from pain and hemorrhage; thirdly, the certainty with which we may avoid injury to the spermatic artery, duct, and nerves; fourthly, the little inconvenience or suffering which the patient experiences after it has been performed; and fifthly, the rapidity of the cure. These considerations will, I think, be found sufficient to recommend this method to the favorable notice of practitioners. Most of the operations described in the books are complicated, severe, and dangerous.

It occasionally happens in this affection that the scrotum is very flabby and pendulous. When this is the case the cure will hardly be complete unless the surgeon retrenches the redundant structures. I have been obliged to resort to this expedient only once in my operations. A portion of scrotum, nearly of the size of a large hand, was excised with the scalpel, and the wound closed by the continued suture, which I consider far preferable, under such circumstances, to the interrupted or twisted.

SUCCESSFUL REMOVAL OF LARGE BODIES FROM KNEE-JOINTS. By DR. STEADMAN. (*Amer. Jour. Med. Sci.*)—The patient was a man 43 years of age, confined in the House of Correction as a common drunkard. At the age of 17 he began to have swelling of the knees, with severe and constant pain, without any known cause. This continued for about three years, when he first discovered a moveable tumor in right knee, just above patella, which has continued to increase till the present time. A similar tumor soon after appeared in the left knee. These tumors have had the effect to impede walking, he being often suddenly seized with pain in the knee, and inability to move further, the tumors being always perceptible at these times. These tumors have increased with his age. Dr. S. operated upon the right knee, March 22d, and on the left, April 1st. In both cases the bodies were brought to the outside of knee, and being maintained there, the skin over them was drawn to one side, in order that the wound of the capsule of the joint might not be parallel with that of the surface, and an incision made upon them, by which they were at once set free. The wounds were united by the ethereal solution of gun-cotton, and there was not the slightest inflammatory action. At the expiration of his sentence, the patient walked with perfect ease.

The bodies were composed of fibrous and osseous tissues, in about equal proportion.

The first removed weighed	283 grs.
2d " "	257 "
The length of the first was	2 1-16th inch.
width " "	1 7-16th "
thickness " "	5-8th "
The length of the second was	2 3-8th "
width " "	1 1-16th "
thickness " "	9 1-16th "

ANEURISM—*Interesting from its locality.* By M. Z. KREIDER, M. D. (*Ohio Med. and Sur. Jour.*)—George Hanstein, aged 48 years, stonecutter, presented himself for relief, June 27th, 1841. The following is the history of this case.

About twelve years ago, while engaged in turning a large granite block, one corner of the stone came in violent contact with the os pubis on the left side of the root of the penis. A stinging pain was felt for some time after the accident. A few days afterwards, a small pulsating tumor (about the size of a hazel-nut) was found to occupy the seat of the injury. This tumor very slowly enlarged ever since that time, until it attained the size of a large hen-egg. It has at no time been a source of much inconvenience. A week since the man went to bed as usual—about midnight he awakened suddenly, feeling a stinging pain about the place of the tumor, and putting down his hand to the part, was surprised to find that the tumor had disappeared. He soon, however, discovered that the scrotum was much enlarged, and that this enlargement was rapidly augmenting. The following are the dimensions of the scrotum at this time—length, two feet—circumference, near apex, seventeen inches—at middle, twenty-two inches. Upon making an incision into the scrotum upon the left side, a large quantity of partially coagulated arterial blood escaped. Finding that hemorrhage still continued, I dilated the wound upwards, and found the bleeding vessel to be a branch of the epigastric—and was the vessel which had been originally injured, forming an aneurism, whose walls giving way, had suffered the blood to escape and find its way into the scrotal sac. The vessel was secured by ligature—the coagula entirely removed from the scrotum, the wound closed by interrupted sutures and adhesive strips—some slight suppuration followed—but in a few days the parts healed, and the man speedily and perfectly recovered.

Fibrous Tumor attached to Superior Maxillary Bone, with Polypus of the Nose—*Ligature of both Primitive Carotids—Removal of Tumor —Recovery of Patient.* By Prof. P. F. Eve. (*Southern Med. and Sur. Jour.*)—In July, 1835, I ligated the left carotid artery, removed a polypus from the left nostril, and dissected from the cheek of the same side, a fibrous tumor which was found attached to the outer surface of the left superior maxillary bone. This foreign growth had an osseous attachment, and was about the size of a guinea-egg. The patient was a youth aged 18 years. His parents inhabited a sickly district of South Carolina, and had recently lost five children; this, their last one, was of a cachectic habit. The polypus returned the next winter, and was removed the second time. In 1836, the patient visited New-York to consult Dr. Mott, who ligated the right carotid. He is now a man of family, managing a large property. I saw him a few days ago, and the only evidence remaining of disease about him, was a slight fulness in the left cheek. Twelve years have now elapsed, and he has experienced no unpleasant effects from the ligature to both primitive carotid arteries.

Removal of nearly the whole Right Superior Maxillary Bone for Polypus of the Antrum—*Recovery of the patient.*—May, 1836, Mr. J. S., aged 21, was operated upon the third time for a large fibrous polypus of the right antrum highmorianum. In two previous attempts the foreign growth had been attacked in the nostril, the antrum was opened, and the soft palate slit up, but without succeeding in its entire removal. In the third operation, a flap was made by two incisions through the cheek and lip, this reflected over the eye, the maxillary bone of the right side thus exposed was separated between its first and second incisor teeth, then the nasal process of the same bone divided transversely, after which the alveolar processes with six teeth (the wisdom tooth not being developed) was gradually detached. The palatine process of the superior maxilla, and the palatine plate of the palate-bone were also removed, and as the fibrous tumor could not yet be pulled away, even by great force, it was separated by curved scissors from the basilar processes of the occipital and sphenoidal bones, and also from the internal plate of the pterygoid process. The mass removed weighed three ounces three and a half drachms. Three sutures were applied to the palate and five to the face in dressing the wound. The latter united, but the former did not. The patient entirely recovered: I have seen him several times since the operation, and believe he is still living in one of the upper counties of this State.—*Ibid.*

Foreign Bodies in the Rectum. By T. M. Harris, M. D. (*Western Journal of Medicine.*)—On the 19th of May, 1846, I was summoned to attend a young Dutchman in this neighborhood, and received the following history of his case:—

He had been suffering from an attack of piles, and having been informed that the disease could be cured by introducing the neck of a well-greased bottle containing some hot spirits of turpentine, he undertook to prove the remedy. But unfortunately, using nothing larger than a half-pint flask, and having, as I suppose, a more than ordinary capacious outlet to the alimentary canal, the flask slipped in, and the sphincter closed upon it.

Here is a dilemma—a man with a half-pint flask in his rectum seeks relief; and what is to be done? Notwithstanding the case borders a little upon the ludicrous, it became, to me, a subject of most serious and anxious concern. At length, however, I resolved upon a plan, and accordingly went to a blacksmith and had a pair of forceps made somewhat after the fashion of the obstetrical instrument, with blades about seven inches long, by about three-fourths of an inch wide, and handles eight or ten inches long. These being prepared, and the blades well greased, I introduced a blade at a time so as to enclose the bottle, locked the instrument, and commenced my efforts at extraction. But the blunt end or bottom of the bottle, presenting, I soon satisfied myself that it would be no easy task to effect its removal. At length by the force of my efforts, I smashed the flask in fragments. Having no further use for my forceps, I laid them aside and set myself carefully to work, removing it, a piece at a time, with my fingers. This I completely accomplished, after laboring faithfully for about three hours. I then washed the rectum by throwing up large quantities of warm water; ordered a dose of sulph. magnesia, and in three days had the satisfaction of seeing my patient about his employment.

On the 29th January, 1847, I was called to see the same patient, and informed that a similar mishap had befallen him, the body now introduced being a beet. I made an examination, and could trace with the finger the large end of a beet of such dimensions as to cause the utmost astonishment; and to increase the difficulties of the case, it had been retained more than 48 hours, the patient having entertained the intention of dying like a hero, without disclosing his condition; from which determination, however, the intensity of his sufferings forced him to depart.

There was now a good deal of tumefaction and tenderness about the anus; and very great tenderness of the abdomen generally—vomiting had set in. I again introduced my forceps, but with great difficulty, on account of the tumefaction and soreness of the parts, and soon found that I could not make the necessary extractive efforts wthout having my forceps slip off: the patient was also exceedingly irritable, and could not endure the necessary force. I now took my forceps to the smith, had the width of the blades reduced one-fourth, and the points turned in so as to form a hook, obtained two or three assistants, and returned to the novel operation.

Having premised a free bleeding and the hot bath, so as to obtain a good degree of relaxation, I administered 35 drops of the tinct. of opium, and having placed my patient on his knees and strapped him down tightly over some chairs, I again introduced my forceps, and quickly succeeded in bringing away a beet nearly seven inches in length, and in its largest diameter about three and a half inches.

It had evidently been selected by my patient on account of its size, in order that it might be impossible for it to be taken in; and feeling thus secure, he had introduced the small end, and pressed down upon it with his whole weight.

I now administered injections, and laxative doses, and restricted my patient to a low diet for two or three days, when he again resumed his employment.

MIDWIFERY.

FALLOPIAN PREGNANCY.—*Death resulting from Rupture of the Ovum.* By D. D. MARVIN, M. D. (*Annalist.*)—A lady of thirty-five years of age, and of good constitution, consulted me on the 2d of May. For several days she had been troubled with uterine contractions and pains in the back, accompanied with a dragging sensation about the loins, occurring paroxysmally with great severity, and aggravated by the erect posture. There was also a uterine discharge, sometimes small in quantity, but at other times more copious, varying from a brown to a purple hue; sometimes consisting principally of mucous and at others free from it, and either sanious or sanguineous in its character.

Sixteen years since she was delivered of her only child, and, though a married woman, had never been pregnant since. During all this period she had enjoyed uninterrupted menstrual regularity until within the last two months previous to her death, when the discharge existed which has been already mentioned as having occurred, and which, indeed, would have disguised the periodical flow if it had taken place, by mingling with it.

Two or three weeks after my first visit she began to complain of a tumor in the right iliac region, occupying the site of the caput coli, attended with pains in the corresponding side and leg. It could be distinctly felt when the colon was distended with fæces, but not when the stomach was empty and flaccid. This circumstance led to the belief that it consisted of fæcal accumulations in the intestine.

These symptoms were combatted by a variety of means suited to the occasion, and the os uteri was examined by the aid of a speculum and found to be slightly ulcerated. The solution of nitrate of silver, of the strength of a drachm to the ounce of water, was applied to the diseased surface every few days, with decided advantage to the condition of the part, and with the apparent effect of subduing the uterine pains and of diminishing the discharge for a period of twenty days. But on the 16th of June, after an evacuation from the bowels, accompanied with considerable effort, she complained that "she felt herself hurt," and was immediately attacked with a recurrence of the uterine pains of great violence, followed by prostration, nausea, pallor, cold sweats, pains in the right side and leg, and complete collapse. The use of restoratives seemed to be attended with decided benefit, and she partially revived; but at four, A. M., again fainted, and though entirely conscious, sunk rapidly and died.

The manner of her death reminded me forcibly of the sinking from sudden hemorrhage, but, on the other hand, there was no discharge whatever of blood externally, yet so impressed was I with the idea, that I did not hesitate to express to my friend, Dr. Cox, who was present on the occasion, that the autopsy would reveal an internal hemorrhage as the immediate cause of death. Yet the real source of the hemorrhage was not anticipated.

Autopsy, twelve hours after death. The cavity of the abdomen contained five and a half pints of blood. Upon searching for the source of it, it was found to have proceeded from a rupture of the membranes of an ovum of two months' development, contained in the right fallopian tube, about midway of its course. Through this rent protruded a portion of placenta, of the usual tufted appearance, about three-fourths of an inch in length and half an inch in diameter. From this little protrusion poured forth the fatal hemorrhage; and to the rupture of the delicate envelope of the ovum, occasioned in all probability by an excessive effort, must be attributed the cause of death.

The ovum measured three inches and nine lines in length, two inches and nine lines in breadth, and one inch and nine lines in thickness. It contained a small fœtus, visible through the transparent membranes; these being left intact, its dimensions could not be accurately ascertained. Its age must have been somewhat less than two months, the last menstruation having occurred sixty days previous to the day of her death, unless, indeed, under such extraordinary circumstances, menstruation may have taken place subsequently to impregnation.

The uterus measured four inches in length, three inches and three lines in breadth, and one inch and nine lines in thickness. Its inner surface presents an admirable view of the decidua, with which it is lined. The os uteri had a granulated appearance, and the superficial ulceration had nearly healed.

Cæsarean Section.—By W. H. Byford. (*Western Lancet.*)—The subject of this operation was the wife of a farmer, aged 26, in labor with her third child. She had been in labor 68 hours when Dr. B. was called to attend her. On examination learned that "the waters had been discharged over 48 hours, pulse 110, face flushed, and the pains were very hard and frequent, which had been the case since the first commencement of the labor. Upon examination per vaginum, a large osseous tumor was found springing from the plain and tuberosity of the ischium, nearly filling up the pelvis, leaving only one inch and a half space between its surface and the opposite ischiatic plain, and extending within the same distance of the sacrum, allowing of more space in the region of the right ischiatic notch.

"The fingers could be made to pass up over the tumor to the linea ilio-pectinea which might be felt, as also the sacro-iliac junction. When the labia were widely separated the mucous membrane of the valve was seen to form a continuous covering to the tumor as far as accessible to vision. No amount of pressure compatible with the integrity of the soft parts would make any impression on the tumor, or in the least alter its position.

"The head of the child was found at the superior strait pressing firmly down upon the tumor with the occiput to the symphisis pubis."

A consultation was now called. The practicability of craniotomy was first discussed.

"But it seemed evident to us all that in consequence of the smallness of the opening through the pelvis and the distance which the child's head was removed from the external outlet we could not lessen the child sufficiently to bring it through, hence hysterotomy seemed the only possible means of relief, and even without further loss of time, this afforded but small hopes of success from the unfavorable state of the patient."

Having satisfied himself of the death of the fœtus, Dr. B. commenced the operation by "a free incision in a line with the right semilunaris, extending from an inch below a line drawn horizontally from the umbilicus seven inches in length towards the pubis." [The reason he assigns for operating in the semilunaris, instead of the linea alba, as is generally practised, was that "the uterus in consequence of its right oblique position in this case offered its side to the knife in the last named place."] The remaining steps of the operation were conducted as usual. On laying open the uterus a fœtus weighing nine pounds was withdrawn, "immediately after which the placenta and membranes were removed before the uterus had contracted much. It very soon assumed the dimensions it possesses post partem in ordinary cases.

"Pressure was then kept up on each lip of the wound from the time the external incision was completed, against the uterine parietes, in order to prevent the extravasated blood from entering the peritoneal sac. The object of the operation being thus accomplished and hemorrhage which was very inconsiderable, having ceased, the lips of the external wound were brought into complete apposition by means of four stitches and adhesive strips; except a small part at the lower angle which was left open for the escape of any discharges found in the wound itself. A compress over the wound and a roller around the abdomen completed the whole process, which occupied about fifteen minutes.

"The condition of the patient seemed to be very little altered, the pulse continuing about the same in frequency as before the operation. The tumor was again examined and presented the same characters as before. We prescribed

℞ Pulv. Dov. gr. viii.
Sulph. Morph. gr. $\frac{1}{4}$.

every four hours; take no nourishment but bread and water.

At 8 A. M. the 17th, twelve hours after operation; slept some during the night, rested without pain until towards morning; pulse 120, rather hard and full. Abdomen a little swollen and tender, particularly so on the left side; complains of oppression at the heart; and pain, though slight all over the left side and lower part of the abdomen. Bled to ℥ xvi. from the arm. The abdomen to be fomented over the seat of pain and soreness. Continue medicine. The venesection relieved the oppression, pain and tenderness very much and filled our patient with gratitude. The pulse fell to 110 and was softer.

At 6 P. M. swelling, pain, tenderness, and oppression have returned with the same frequency of the pulse which was decidedly hard. Bled to ℥ xx. with marked relief to all symptoms—ordered to continue the medicine, fomentation, etc.

At 8 A. M. the 18th. To all appearance better; had a tolerable night's sleep, excepting a short time occupied by nausea and slight vomiting, pulse 110 soft, skin moist, has urinated four times since operation without difficulty, some coagulated blood passed from the vagina through the night with ordinary after pains; has had no alvine discharge since operation; ordered to discontinue opiates and take calomel grs. xx. to be followed in four hours with decoct. Senna and Sulph. Mag.

At 5 P. M. the medicines operated three times copiously, bringing away dark fluid stools. The patient much worse; her pulse 140, weak; surface bathed in cold clammy perspiration; extremities cold; vomiting great; listlessness and apathy; countenance pale; great oppression of breathing, in short, sinking very rapidly. Doctor Conyngton consented to stay with her through the night. Despite all means of the most energetic character that he could employ, such as warmth and counter-irritants to the extremities, brandy and laudanum, etc., she continued to sink and expired about 8 A. M., on the 19th.

During the last twenty-four hours her abdomen was not swollen, tender, nor painful, but the peculiar oppression about the heart continued until death.

The patient had a node on the left tibia and the right was irregular throughout the surface of the superior third.

The first labor was not more than ordinarily severe. The second, however, which occurred on the 28th August, 1845, was unusually tedious and painful. There has been pain in the left side of the pelvis ever since that confinement, which was augmented during her last pregnancy.

OBSTRUCTED LABOR—*Caused by Tumors.* (Southern Med. and Sur. Jour. for Aug.)—Dr. W. P. Parker has communicated two cases, with remarks, bearing upon this subject. The first a primipara about 18 years old, of nervous temperament. She had been in labor 15 hours, and the first stage was complete—pains violent and sufferings intense. She was becoming fast exhausted from the violent action of the uterus and abdominal muscles, pains of labor, tenesmus, etc. Upon examination, *per vaginum*, the vaginal canal was found much impinged upon by a large tumor lying against its posterior wall—upon examination, *per rectum*, its contents were found to be composed of "hard balls of excrementitious matter, rough, and gritty to the touch, as if it were fragments of stone." By means of a scoop these were removed one by one, and a short time afterwards the labor was safely completed.

The second a multipara, aged about 35 years, at the full period of gestation, in labor about six days. Abdomen pendulous—the gravid uterus, with the head of the child over in front of the symphysis pubis, entirely without the pelvis—the pelvis filled by a tumor, (probably ovarian,) occupying the recto-vaginal septum, which gave but slight evidence of fluctuation, by insinuating the finger between the urethra and tumor the os uteri could with great difficulty be felt—fully dilated. After some delay in obtaining counsel, it was determined on to puncture the tumor, which was accordingly done—twelve pounds of a yellowish fluid, resembling thin honey, flowed, containing dark-colored shreds and flocculi. The gravid uterus was then raised over the os pubis into the pelvis. A few minutes after which the labor was completed in safety, both to mother and infant. The patient had a rapid convalescence—and eighteen months after evinced no signs of a return of the tumor.

In his remarks, Dr. P. says—

> These obstacles do not at all interfere with the first stage of labor; for however large and unyielding be the tumor, the mouth of the womb continues to dilate with as much uniformity as ever, except in cases where the uterus itself be involved in the disease.
>
> The immediate danger is in direct proportion to the resistance and the violent action of the uterus and abdominal muscles, for if the resistance and action both be great, there will be great danger of the parietes of the uterus being lacerated, and thus producing fatal consequences; besides this, the powerful action of this organ and the great pain produced thereby, hasten exhaustion, and thus the vital forces escape, pain by pain, as the electric spark reduces the prime conductor.

SPONTANEOUS EVOLUTION OF THE FŒTUS, By N. W. Cole, M. D. (*New-Jersey Medical Reporter.*—On the evening of the 10th of October, I received a message from my friend Dr. Haines, to visit with him a female in labor of her eleventh child, to whom he had been called in the afternoon, and to bring with me my instruments. The doctor informed me that upon his arrival he found one child born, and that another was presenting, with the shoulder and right arm protruding. He stated also that he had made several unsuccessful attempts to turn. Upon examination I found everything as above stated.

The labor pains had entirely ceased, from the time of the birth of the first child. Its waters evacuated, and the uterus was closely and rigidly contracted around its body, so much so that, after repeated efforts, I was obliged to abandon all idea of turning without using more force than would be justifiable.

While preparing the necessary instruments for taking the child away, (it was dead beyond all doubt—there being no pulsation from the time of my arrival,) the mother's pains returned; and Dr. Haines, who was sitting with her, observed the child to be lower down. I immediately made an examination, and found some change was taking place. Its body seemed to descend, and I distinctly felt its shoulder ascend. In less than five minutes from the return of the pains, it had made a complete somerset. The feet and breech came down, and the head followed without any difficulty. It was healthy and of the average size.

CASE OF SUPERFŒTATION AND MIXED BIRTH. By THOMAS B. TAYLOR, M.D. (*New-Orleans Medical and Surgical Journal.*)—The following remarkable case of superfœtation and mixed birth occurred in this neighborhood a few months since; and as there are but few cases of a similar character on record, and as this differs in some of its features from any other, I have concluded to report it, provided you may deem it worthy of a place in your Journal.

Clarissa, a negress, the property of Mr. A. Knox, aged about 35 years, in May last, was delivered of twins; one a mulatto, and the other a negro child. She had been married to a negro man on the plantation, of delicate constitution, for many years, and had had several children by him. Her menstrual discharge had occurred for several months previous to her pregnancy, at about the full of the moon. She felt herself pregnant by her customary signs, about the middle of the month; and, to confirm her suspicions, at the next period it did not appear. About three weeks from the time she first felt she had conceived, and one week after her menses had failed to appear, she had sexual intercourse *once* with a white man. She slept with her husband every night—had connection with him the night before she had intercourse with the white man, but not on the same night. At their birth the mulatto child bore marks of being at least three weeks younger than the negro; thus sustaining the woman in her suppositions, as to the time between her two conceptions. This woman is a faithful servant, and I have every reason to believe she told the truth in relating the circumstances of her case to me.

MATERIA MEDICA AND TOXICOLOGY.

ANIMAL CHARCOAL AS AN ANTIDOTE. By B. H. RAND, M. D. (*Medical Examiner.*) After mentioning the different substances which have been proposed by writers as general antidotes, worthy of being resorted to in most cases of poisoning, the author mentions the experiments of Dr. Garrod, first published in the Transactions of the Medical Society of London, *New Series*, vol. 1st, he then alludes to those of MM. Wapen, Holpoff, Warrington, and others, on the same subject; after which he details the following among numerous others which he instituted to determine the antidotal value of this substance.

1. One grain of pure morphia was swallowed with about an ounce of pure animal charcoal, in warm water; no narcotic symptoms supervened, but there was some gastric irritation, which subsided in the course of the day.

2. One grain of sulphate of morphia was digested with pure animal char-

coal until all bitterness was removed; the liquid, filtered off and swallowed, produced no effect.

3. Ten grains of extract of belladonna were swallowed with two drachms of the charcoal; there followed vertigo, dilated pupils, dimness of vision, exceeding dryness of the throat, and desire to sleep, all of which symptoms were relieved by the spontaneous vomiting of a very acid matter and the use of stimuli. The pupil remained dilated through part of the next day.

4. The last experiment was repeated, an antacid having been premised, and the proportion of charcoal being doubled. Some dryness of the throat followed, but with no other symptom of the influence of the drug.

5. Fifteen grains of powdered digitalis were taken, with three drachms of the animal charcoal, without the slightest disturbance of the functions.

6. Twelve drops of the officinal hydrocyanic acid were swallowed, with two drachms of the pure charcoal, without a sedative result.

7. One grain of strychnia, dissolved by the aid of a drop of chlorohydric acid, was digested with animal charcoal until all bitterness was removed. The solution, filtered and swallowed, produced no effect; a similar solution evaporated and tested with nitric acid gave no red tinge.

8. One grain of strychnia was swallowed, with an ounce of pure animal charcoal; no effects due to the strychnia could be perceived.

9 The purgative extracts were next tried, but produced no effect when sufficient animal charcoal was taken.

10. Camphor and musk were removed by animal charcoal from their tinctures, so far that they did not precipitate on the addition of water.

11. Phosphorus was removed from its ethereal solution by the charcoal.

12. Iodine was so far removed from its tincture and compound solution as not to strike a blue color with starch, and the iodine could not be liberated from the animal charcoal at a red heat.

13. Arsenious acid and a solution of arsenite of potassa were apparently unaffected, either in the hot or cold solution, by animal charcoal. This result, although it agrees with those of MM. Wapen and Graham, does not with the observations of Dr. Garrod, who states that animal charcoal "has greater power of removing arsenic from its solution than the hydrated sesquioxyde of iron."

14. A solution of the bichloride of mercury, being treated with animal charcoal, gave, on filtration, no precipitate with ammonia.

It has been said that the action of the charcoal is purely mechanical, enveloping the poison, thus protecting the coats of the stomach from its action, and prevented the absorption. To this Dr. Rand replies, that this may be true as regards arsenic, which is not removed from its solutions by animal charcoal, and such is the result of the experiments of Orfila and Christison; but the case of the alkaloids is different—they are wholly removed from their solutions by animal charcoal entering into a firm union with them. This, however, is not the case with vegetable charcoal and lamp-black, which are nearly or quite useless in counteracting poisons. When given as an antidote, animal charcoal should be mixed with warm water as hot as the patient can swallow, as its action is much aided by an elevated temperature. Dr. Rand thinks we are warranted by the present state of our knowledge on this subject, in drawing the following conclusions:

1st. That animal charcoal has the power of withdrawing, when used at a proper temperature and in sufficient quantity, most, if not all, known vegetable and animal poisonous principles, and certain mineral poisons from their solutions.

2d. That, given at the same time with, or shortly after these poisons have been swallowed, it prevents their deleterious action.

3d. That, given in cases of poisoning, it can exert no injurious influence, but, on the other hand, promotes vomiting, entangles the poison and protects the coats of the stomach against it.

4th. That, although it cannot be substituted for the usual antidotes in poisoning by mineral substances, yet it may be usefully employed in conjunction with them or in their absence.

POISONING BY COCCULUS INDICUS. By H ROSENKRANS, M. D. (*North Western Medical and Surgical Journal.*)—On Thursday last we witnessed in our town the effects of poisoning with Cocculus Indicus on a man about forty years of age; he was a stranger who came to our town the day previous to taking the poison. Being an inebriate, he found and drank a liquid containing it, which had been left in a horse stable, where it had been prepared in whiskey to kill lice. It was early in the day that he took the fatal draught, and before he had taken anything in his stomach. After drinking the poison he felt immediately alarmed, and complained of sickness at the stomach, and had tremor; he then started from the stable, and, after walking a few rods, fell in the street, violently convulsed, and delirious, both during and after the paroxysm; a second and third fit of convulsions, like the first, followed at short intervals. This last convulsive fit left him in a state of deep coma, in which condition he remained till death, which followed within an hour after the draught had been taken.

Post Mortem.—Stomach tinged yellow; mucous membrane slightly contracted; heart and lungs filled with dark fluid blood. The brain was not examined, yet from the congested face and eyes and the deep coma, we had good reason to conclude the brain was deeply congested. The examination took place five hours after death. A want of time prevented the inspection of the brain.

POISONING BY ARSENIC.—*Successfully treated with Calcined Magnesia.*—Dr. E. BISSEL, of Conn., mentions in the American Jour. of Med. Sci. a case of poisoning by arsenic. The patient took one scruple with the intention of committing suicide. Two hours after it was swallowed, Dr. B. saw his patient; administered an emetic of sulph. zinc, which operated without any relief; his pulse was 130 per minute, small and wiry; there existed great constriction and dryness of the fauces, agonizing and burning pain in the stomach, etc. Dr. B. was now induced to try the antidotal power of calcined magnesia. Accordingly one drachm in a little milk was ordered every hour. At this time his pulse was 150 per minute, and the unfavorable symptoms were continually increasing; the right hand was completely paralyzed. Immediately after the first dose of the magnesia the patient appeared relieved, each successive dose produced the most surprising and marked mitigation of the unfavorable symptoms. Twelve hours after, the right hand had recovered its power, and the patient's pulse had fallen to 85 per minute; he had dozed freely during the intervals of taking his medicine; the magnesia was continued in the same dose every three hours; light nourishment was allowed and the patient soon after completely recovered. Since Prof. Peter, of Transylvania University, first published his experiments on, and more particularly called the attention of the profession to, magnesia as an antidote, several cases have been reported in American journals which tend to illustrate its beneficial effects. Dr. Taylor, in his recent work on poisons, states that upon arsenic in powder, as it is almost universally taken, magnesia has no effect as an antidote; and if it acts beneficially, it must be by enveloping the particles of the poison, and mechanically preventing their contact with the mucous membrane of the stomach. This opinion is founded upon the result of a series of experiments made with the best magnesia of the shops, and intended to ascertain its value as an antidote. We may also state that Dr. Christison places but very little value upon it as an antidote.

On Chinoidine. By J. S. Unzicker, M. D. (*Western Lancet.*)—Chinoidine has been for several years past extensively used in Germany, but up to this time has not been generally known in this country.

It is a resinous substance, and was first discovered and separated from the mother liquor of sulph. quinine, by Sertuerner, a chemist. There are two kinds in commerce, the pure and impure. The genuine is hard, and has a smooth, glossy break, like the hepatic aloes, which it resembles in color. It is transported in oblong flat lumps weighing about one pound each, wrapped in wax paper; will dissolve perfectly in dilute sulphuric acid, alcohol and ether, forming a clear tincture of a brown color.

It is insoluble in cold, but scantily soluble in warm water, imparting to the latter a strongly bitter taste.

The adulterated comes in jars, and is soft; will only partly dissolve in alcohol and ether, not forming a clear tincture like the other.

Chinoidine has been analyzed by a number of chemists, but as yet no satisfactory results obtained. It contains, according to Liebig, identically the same composition as quinine, but differs only in form, one being crystalline, the other not, and therefore he terms it the amorphous quinine. Chemical investigations, as far as they have extended, have thrown an interesting light upon the testimonies borne to the efficacy of chinoidine in the treatment of intermittent fevers; and there is no doubt in my mind, that the amorphous, if prescribed in its pure state, like the crystalline quinia, will produce the same effect on the animal organism, only that the effects of the former are more lasting.

I have used chinoidine for the last three years more extensively than quinine, and on an average with better success, especially in cases of long standing. In a number of obstinate cases of long standing, who came here from the Wabash country, quinine was first given without any effect. I then gave the chinoidine, which not only checked the paroxysms, but no relapse followed afterwards.

From the experience which I had during the above time with this remedy, I think the return of the fever was one third less than when I used the quinine. It is particularly suited in cases where the digestive organs are not much debilitated. My mode of giving it is thus:—℞. Chinoidine, gr. xij.; rad. ipecac., gr. j.; morph. acet., gr. 1-4. Mix, and make into six pills, to be given in two doses, two hours previous to the chills. Some German physicians prefer to give the chinoidine in combination with cremor tartar and cloves, in the form of pills.

This I found would have the same effect as that of many grains of quinine with the same combination. After the chills were stopped, I would then give a teaspoonful of the tincture (ʒj. to ℥j. of alcohol) from two to three times daily in some claret wine, for several days afterwards.

It has been said by some, that the effects of chinoidine depended on the quantity of chinine and cinchonine it contained. This is an error; for suppose it did contain some chinine and cinchonine, how much could there be in twelve grains of chinoidine? Surely not half a grain of each! and would they have produced the effect above described? Certainly not. Many, as well as myself, have labored under this mistake, until they have learned to distinguish between the pure and impure article, for if it is pure the results will be alike.

Chinoidine will undoubtedly, in time, become the great remedy of practitioners in the West; for when we consider the high price of quinine, $3 per ounce, and chinoidine at 40 cents per ounce, and besides a more effectual remedy than the former, no doubt is left of its adoption into general use.

MISCELLANEA.

Anæsthetic Agents.—*Chloroform.* The Journals, especially the foreign ones, continue to give a prominent place to the various experiments with, and accidents from chloroform and other anæsthetic agents. There is a reaction going on against the use of these agents which, we are confident, will be productive of good. It cannot be that articles so powerful can be used on every trivial occasion, and without discrimination, without occasionally producing the most disastrous results. If only one case in a thousand, or even in ten thousand, of artificial anæsthesia, proves fatal, it should make us extremely cautious in our administration of the substances that produce it. We have been, for some time, among those who believe that neither ether nor chloroform should be used, unless in cases involving an operation or condition which may endanger life, and then with great caution. This, we opine, will ere long be the almost universal belief and practice of the profession. It may be that we are too fearful; we hope we are. If used only in the limited number of cases included in the above restriction, their discovery must still be regarded as one of the greatest and happiest events of modern times.

The editor of the Am. Jour. of Medical Sciences has collected in his October No., most of the articles and facts which have been published during the preceding three months. No less than six cases of death are reported, besides one of fatal hemorrhage from the lungs, resulting from the inhalation of chloroform. In four of the cases, the death was almost instantaneous; in one, the patient, a man, lingered in convulsions for forty-eight hours, and in the other the circumstances of death are not stated. The details of two examinations, *post mortem*, are given, one by M. Gorre, Surgeon-in-chief to the Hospital of Boulogne, and in the other, Mr. Badger, a Solicitor of Rotherham, Yorkshire, was the sufferer. In M. Gorre's case the most remarkable appearance was that of bubbles of air in the veins, wherever divided. The heart is described as "excessively flaccid, of the usual size, right and left cavities absolutely empty. The blood "*was literally as black as ink.*"

In his remarks upon this case, M. Gorre uses the following language:—"Chloroform in certain kinds of constitution, *which it is absolutely impossible for the man of science to recognise*, may cause death with a lightning-like rapidity. Even in experienced hands, there is no certain safeguard against the unfortunate consequences of this agent, which only too well justify the words applied by M. Flourens to chloroform, "*a marvellous and terrible agent.*"

Mr. Badger applied to Mr. Robinson, a distinguished dentist in London, to have some teeth extracted. Mr. R. stated in his evidence that he had administered anæsthetic agents at least three thousand times. A drachm and a half of chloroform was put on a sponge, which was not held close to the mouth or face. After inhaling about a minute, the patient requested that it should be made stronger. Before this could be done, his head and hands dropped—he was dead. Mr. Badger was a stout muscular man, and there was no reason to suppose that he was suffering under any organic disease.

The lungs were healthy and crepitant, but short and small. The heart was paler than usual, flaccid, not enlarged—the left ventricle interspersed with fatty degenerescence. The liver weighed *eight pounds.* There were dark grumous clots of blood in both ventricles. Although there was organic disease in this case, yet the patient was described as a healthy muscular young man, "who had suffered from no difficulty of breathing, or any other apparent disease."

In numerous cases referred to, the effects of inhalation were very unpleasant without being fatal. These should be borne in mind by way of caution. One case of tetanus successfully treated by chloroform is quoted from the London Lancet, and the same article has recently been used, but unsuccessfully, in hydrophobia.

The principal novelty connected with anæsthetic agents, is the experiments of Mr. Nunnely and Prof. Simpson, to produce partial or local loss of sensation. By applying chloroform, either in vapor or substance, to the finger or hand, for example, a burning, stinging sensation is soon produced, and the part becomes somewhat benumbed. We cannot detail the experiments. It is sufficient to say, that while they were perfectly successful upon *frogs*, they were far from being so upon the human subject. Dr Arnott, of Brighton, recommends *cold* as a means of producing local anæsthesia. He says that "a temperature ranging between 5 and 20 degs., Fahr., (which can easily be produced by the common frigorific mixture of ice and salt,) will produce complete anæsthesia of the skin in two or three minutes." It is necessary to examine the skin from time to time, and to stop short of actual congelation. These experiments, while they may disappoint the high-raised expectations of some, will no doubt lead to useful results. We shall endeavor to keep up with the progress of medical opinion on this subject.—*Ohio Med. and Surgical Journal.*

Emigrants, Mortality of, and Statistics.—From an interesting letter on this subject communicated to us by its author, Dr. T. Stratton, R. N., it appears that the total number of emigrants who embarked for Canada, during the year 1847, from Scotland, England, Ireland and Germany, was 98,106, of whom 13,365 died.

Number that died on the passage,	5,293
Admitted into Grosse Isle Quarantine Hospital 8,563, of whom died,	3,452
Died in Quebec Marine and Emigrant Hospital and in the City of Quebec, up to 9th October,	1,041
Died in Montreal Emigrant Hospital and in the City of Montreal up to 1st November,	3,579
Total deaths,	13,365

Up to the 1st of November, and as far inland as Montreal, one emigrant in every seven had died; many of those who passed on from Montreal, sickened and died at one or other of the different places on the route, "so that it is underrating the mortality to say of those who left Britain, one person in every five was dead at the end of a year."—*Brit. Amer. Journ. of Medical. Science.*

Starling Medical College.—Lyne Starling, Esq., has recently added $5000 to the previous $30,000, given to the Starling Medical College, making in all, $35,000, to enable the Trustees to erect a college and hospital after the plan submitted by R. A. Sheldon, Esq., Architect, of New-York city. The work upon the foundation will soon be commenced, and the building will be when finished, the most complete, in all its parts and accommodations, of any which we have ever seen. It will consist of a centre and two wings, the whole 135 feet in length, and the centre 68 feet front by about 100 feet deep.

There will be three lecture rooms capable of seating about 400 persons each, and ample hospital room for from thirty to fifty beds. The whole will be heated by furnaces, and amply supplied with water. The building is to be irregular in its plan, securing abundant light and ventilation, and will be, when completed, an ornament to the city and state.

Nitrate of Silver.—We are often called on by physicians to point a stick of lunar caustic for convenient use. Several modes are in use: by solution, by mechanical force, and by casting in a mould; but by far the most expeditious and easy method is the following: Take a silver coin, (say half a dollar,) hold it with a pair of forceps over the flame of a lamp until it is hot enough to fuse the nitrate, then having the cylinder of caustic in the right hand, between the thumb and index-finger, holding it at an angle of 30 or 40 degrees with the surface of the coin, pressing the point on the latter and turning the cylinder as the part in contact fuses off. A little practice gives great dexterity; and a point of any required acuteness may be obtained, whilst the excess of the salt on the surface of the coin can be returned to the bottle.—*American Journal of Pharmacy.*

Cholera.—*Report of the Medical Advisers of the Sanatory Committee of the Board of Health of the City of New-York.*—At a meeting of the special committee of the Board of Health, held this day, at the Mayor's office, the following report from the medical advisers of the committee, prepared in accordance with the resolution adopted by the special committee, at a previous meeting, was made, which, on motion was accepted, adopted, and ordered to be published in the city papers.

W. F. HAVEMEYER, *Mayor.*
NIEL GRAY.
MORRIS FRANKLIN.

Mayor's Office, Dec. 8, 1848.

The undersigned, having been appointed by the Sanatory Committee of the Board of Health to prepare a communication to the public, in relation to the epidemic cholera with which this city is at present threatened, respectfully report that, as yet, the disease is entirely limited to the quarantine, and the hope is cherished that under the protection of a kind Providence, this city may be preserved from its ravages. It is evident, however, that the cause of the disease is hovering in the atmosphere about us, and it therefore becomes a duty to adopt in season all such precautionary measures as may tend, if possible, to mitigate its evils, should it unfortunately assail us. Under this impression, they beg leave to make the following suggestions:

As the whole history of the cholera shows that its diffusion is promoted by all those causes which have a tendency to render the air impure, the first and most important concern relates to the cleanliness of the city. To accomplish this, the undersigned are satisfied that the Board of Health have taken such measures, and will continue to do so, as they trust will be efficient. The Board of Health, however, it is evident, cannot do every thing, and the committee would respectfully call upon their fellow-citizens to coöperate with them in every possible way in their power. Sources of filth and impurity may exist without the knowledge of the public authorities, and every citizen should feel the necessity of keeping a watchful supervision over his own premises, and when individual efforts are inadequate, to call upon the board for aid and assistance.

Believing that much may be done in the way of prevention, if not cure, of the disease, in case it should unfortunately attack us, the undersigned would offer a few suggestions of a general nature, founded on experience, leaving the application of them to good sense and discretion of the community at large.

In the first place they would advise particular attention to clothing. From the nature of the complaint, it is evident that much depends upon keeping the body warm, and protecting it from sudden exposures to cold and moisture. Flannel next the skin should be a universal article of apparel, and they would respectfully suggest to those charitable associations which are in the habit of supplying the poor with clothing to make this an object of special attention. At this season of the year, too, the supply of fuel to the poor should be liberal.

In the second place, the diet should be particularly attended to. The undersigned would not advise any sudden or great changes in the ordinary modes of living, where these modes are temperate and have been found to agree. Such changes, they believe, would do more harm than good. From the peculiar nature of the disease, however, it is well known that certain kinds of food are injurious, and, without going into particulars, they will merely state that all such articles as have a tendency to relax the bowels ought to be avoided. All crude and raw vegetables, as well as violent purgative medicines, are calculated to do mischief. Excesses, either in eating or drinking, cannot be too rigorously abstained from.

In the third place, attention to personal cleanliness, by the frequent use of the tepid bath, is particularly recommended.

In the fourth place, the preservation of a calm and composed state of mind is all-important, and may do more than is generally supposed in preventing the onset of this disease. It is the result of experience that all epidemics are aggravated more or less by mental disturbance, whether in the shape of active panic or low despondency. To the cholera this is particularly applicable. While our citizens, therefore, use every prudential and precautionary measure, let them keep a good heart and dispel all fear.

In the fifth place, with regard to the treatment of cholera, it may be observed that, as a general rule, the disease does not attack so suddenly as to preclude the possibility of calling in timely medical assistance. A relaxed state of the bowels for a longer or shorter period, gives notice of its approach. In all cases, therefore, when any disorder of this kind exists, common prudence will suggest the necessity of resorting to medical aid. If this be done in season the disease may generally be promptly arrested. When professional aid cannot be immediately obtained, and where simple relaxation of the bowels exists, 15 or 20 drops of laudanum may be taken; to be repeated in one or two hours, according to circumstances. For young persons and children the dose must be reduced according to the age—at the age say of ten years, 5 drops; at the age of two or three years, 2 or 3 drops.

Where the symptoms are more severe and the patient is cold, in addition to the laudanum, he should be put immediately to bed between blankets, and every appliance in the shape of bottles of hot water, bags of hot salt or sand, frictions, etc., etc., etc., be diligently resorted to. A strong mustard poultice, too, should be applied over the region of the stomach, to remain on until it produces smarting of the skin. In addition to this, a little brandy and water should be given, with the view of restoring warmth. As in this city no difficulty in obtaining the speedy assistance of a physician can exist, any directions in relation to the after treatment are deemed unnecessary.

JOHN B. BECK, M. D., *Chairman.*
RICHARD L. MORRIS, M. D.
JOSEPH M. SMITH, M. D.

NEW-YORK, Dec. 8, 1848.

NEW MEDICAL SCHOOLS.—By our recent exchanges we learn that two new Medical Schools were advertised to go into operation the present winter in the North-West. One at Rock Island, Illinois, and the other at Iowa City, Iowa. Can it be that the wants of the profession, in the far West, demand the establishment of these and other contemplated schools? If so, certainly we are behind the times in our information. If not, why increase the already too numerous list of medical schools in places where, to say the most, but slight and imperfect facilities can be realized for the acquirement of a thorough scientific and practical education?

AMERICAN MEDICAL ASSOCIATION.—By desire of the Committee of Arrangements, the undersigned request all Societies and other Institutions, authorized to appoint delegates, to send correct lists of those chosen to attend the *next annual meeting*, to Dr. HENRY J. BOWDITCH, Boston, on or before the 1st of April, 1849.

Editors of Medical Journals are respectfully solicited to circulate the above request, a compliance with which will greatly facilitate the organization of the Delegates when assembled.

ALFRED STILLE,
HENRY J. BOWDITCH, } *Sec's of A. M. A.*

☞ The Association, at its meeting in Baltimore, directed that a copy of the Transactions should be sent to such members *only*, as have paid the annual assessment for the present year (three dollars.) Those members paying to the Treasurer five dollars are entitled to three copies.

Medical Societies which have been represented in the Association will be furnished copies on the same terms as members (viz., three copies for five dollars) on remitting the amount to the Treasurer.

To other persons the Transactions will be furnished at the rate of two dollars per copy in paper covers, done up for mail, or two dollars and fifty cents in embossed cloth, on remitting the amount direct to Messrs. Lea & Blanchard, Philadelphia. Or orders left with booksellers will be executed by Messrs. Lea & Blanchard.

OBITUARY.

DEATH OF DR. CARPENTER.—Died at New-Orleans on the 4th of October, Dr. W. M. Carpenter, Professor of Materia Medica and Therapeutics in the Medical Department of the University of Louisiana, aged 38 years. The early death of Prof. Carpenter will long be regretted. In his death the *science* of medicine has lost one of its warmest exponents and firmest advocates. He was one of the first editors of the New-Orleans Medical and Surgical Journal, and his contributions to its pages always gave evidence of the workings of a strong and vigorous mind governed and guided by the strict rules of the inductive method, as evidence of this may be cited, (not as the only illustration which his writings furnish, but as one from among the many,) his "Remarks on the Periodical Maturation and Discharge of Ova in Man and other Mammiferæ; and the Practical Bearings of this Theory." This essay will ever remain one of the first contributions in point of value, which the literature of our country furnishes.

DEATH OF DR. HALE.—Died at Boston, on Sunday, the 12th of November, Enoch Hale, M. D., M. M. S. S., aged 58 years. Dr. Hale was a graduate of the Medical College of Cambridge University, (August 20, 1813.) He commenced the practice of his profession in Gardiner, in the then District of Maine. He afterwards removed to Boston, was appointed a physician to the Boston Dispensary, and at the time of his decease was one of the attending physicians to the Massachusetts General Hospital. He was a liberal contributor to the medical literature of our country. Among the many of his published writings may be mentioned his inaugural dissertation entitled "Experiments on the production of Animal Heat by Respiration." This paper called forth an extended reply from Mr., now Sir Benjamin C. Brodie. His second publication was his "History and Description of an Epidemic Fever, commonly called Spotted Fever, which prevailed at Gardiner, Maine, in the spring of 1814." He received the Boylston prize in Harvard University in 1819, for the best dissertation "On the Communication between the Stomach and Urinary Organs," and again a second prize in 1821 for the best dissertation "On the Propriety of Administering Medicine by Injection into the Veins." Both these dissertations were founded on experiments. The last contains the particulars of the author's experiments on the effects of injecting castor oil into his own veins. At the time, Dr. Hale supposed that he was the first that had ever made the attempt on the human subject. Fabricius and Smith had, however, preceded him. On the 29th of May, 1839, he read a paper at the annual meeting of the Massachusetts Medical Society, entitled "Observations on the Typhoid Fever of New England," this paper was soon afterwards published in book form. Among the numerous contributions which he furnished to the medical periodical press, may be mentioned "Remarks on the Typhus Fever of this Climate," which may be found in the Medical Magazine, Vol. II., 1833. This paper contains one of the best descriptions of the anatomical lesion of the glands of the intestines which the early literature of our country furnishes.—*Condensed from Boston Medical and Surgical Journal for Nov.* 22.

PART FOURTH.

FOREIGN MEDICAL RETROSPECT.

ANATOMY AND PHYSIOLOGY.

Note on one of the Anomalies of the Right Subclavian Artery, with Absence of the Recurrent Nerve of the Right Side. By M. Demarquay.—Anatomists and surgeons have remarked with great care, all the anomalies of origin and of distribution which the right subclavian artery can present. It is not my object here to record them. I desire only to draw attention to a curious fact which accompanies one of these anomalies; and to speak of the absence of the right recurrent nerve, when the subclavian artery of the same side arises from the left part of the aortic arch, in place of arising from the brachio-cephalic trunk as usual. When the right subclavian arises from the left part of the aortic arch, it directs its course to the right side, either by passing in front of the trachea, as Professor Blandin has observed, or behind it, or behind the œsophagus, to restore itself to its normal position. In these various circumstances he, (Professor Blandin,) was curious to know what became of the nerve. Is it alike reflected on the artery, or did this anomaly of origin bring with it a modification in the nerve? This it was which I verified for the first time, in 1843, in a preparation which may be seen in the museum of the school.

In this case the subclavian artery passed from left to right, and after having taken its origin from the left part of the arch of the aorta, passed between the œsophagus and the vertebral column, and thus reached the space between the scaleni. In this case, which has been recorded in Professor Cruveilhier's "Treatise on Anatomy," there was absence of the inferior laryngeal nerve. Since then, I have had occasion to examine another subject in which the same arterial peculiarity existed, and where there was a like absence of the recurrent nerve. In these two anomalies, this is the character of the pneumogastric:—it occupies the normal position; from its internal part are given off a great number of nervous filaments, which are distributed to the larynx, to the inferior part of the pharynx, to the trachea, and to the œsophagus. All these nervous filaments, destined to replace the inferior laryngeal nerve, pass under the common carotid artery: some before this vessel, to distribute themselves to the parts which they are destined to innervate. These small nerves, which supply the trachea and œsophagus with nervous energy, are on the whole alike in volume to those which normally furnished the recurrent. As for their length and direction, they are a little different, being longer and directed more transversely. The nerves which furnish, usually, the recurrent to the larynx, come, as in the case which occupies us, from the pneumogastric; this latter affords to the level of the larynx, a branch so voluminous, that it might be considered a veritable recurrent nerve; and which arriving at the inferior part of the larynx, is in every respect disposed of in the same way as the termination of inferior laryngeal nerve, a termination so well studied by Professor Blandin. The cardiac nerves furnished ordinarily by the recurrent, are given off by the pneumogastric.

Dr. Demarquay then observes, that in a functional point of view this anomaly is of no moment, justly remarking that in certain operations, as in tying the common carotid, it might occasion great embarrassment to the surgeon, and then concludes as follows:

Such, then, are four cases where the abnormal origin of the right subclavian brings with it an important modification of the nervus vagus. Are these, then, accidental cases, or are they the sign of a phenomenon, always persistive when the subclavian (right) artery arises from the left part of the aortic arch;—and does this induce absence of the recurrent nerve? This I would not venture to say: further observations must prove it.—*Prov. Med. and Surg. Jour., from Gaz. Méd. de Paris.*

Position of the Rectum in New-born Infants.—M. Huguier in commenting upon the difficulty that sometimes exists in passing the canula in the operation for artificial anus, observed that, in the fœtus at full time, the rectum is not found on the left, but on the right side. He has especially observed this in respect to females, in whom the rectum corresponds with the right side of the womb, while at a later period it will be found on the left side.—*Brit. & For. Med. Chir. Rev. from Gaz. des Hôp.*

On the Minute Structure of the Suprarenal Capsules in Man, and the four Classes of Vertebrated Animals. By Prof. Alex. Ecker. Of this valuable monograph, which is worthy to take rank with Mr. Simon's Essay on the Thymus Gland, we shall endeavor to present, within a narrow compass, the most important features. After some general observations on the nature of the so-called "vascular glands," Professor Ecker proceeds to inquire into their true relations with the acknowledged glands; of the essential elements of which he gives the following enumeration.

1. The glandular membrane, thin, and structureless, fashioned into variously-formed cavities, vesicles, or canals. These cavities either open externally, as is the case with glands having a *permanent excretory canal;* or they are closed and only periodically open, as in the case of the ovaries and the vesicles of the intestinal mucous membrane, which are examples of glands with a *temporary excretory canal.*
2. A capillary network distributed over the surface of the glandular membrane.
3. Cells and cell-nuclei, which either cover the internal surface of the membrane in question, or entirely fill its cavity.

These structures must be discovered in the "vascular glands," if they are still to be ranged in the class of glandular organs. In the *thyroid* gland, the true normal vesicles were first made known by Bardeleben (1841); he did not, however, determine the nature of their contents. These were stated by Mr. Simon (Phil. Trans. 1844,) to consist of cells and cell-nuclei; and Professor Ecker has arrived at the same conclusion. The truly glandular structure of the *thymus* has been completely demonstrated by Mr. Simon, whose researches are confirmed by those of Dr. Ecker. In the *spleen*, the glandular vesicles have been known as Malpighian bodies, since the time of the anatomist from whom they received their name; but doubts have been entertained regarding the existence of a glandular membrane around them, especially in the mammalia. Professor Ecker, however, has been able to ascertain the existence of this membrane in mammalia as well as in birds. The accounts hitherto given of the *suprarenal* capsules are very imperfect; the distribution of the blood-vessels has been well described, and the occurrence of cells and cell-nuclei in their tissue has been determined; but the glandular membrane has not yet been demonstrated. We can only give Professor Ecker's *résumé* of his researches.

1. The intimate structure of the suprarenal bodies is the same in the four classes of the vertebrated animals.

2. Everywhere we meet with closed glandular vesicles, formed of a structureless membrane, and containing a glandular substance.

3. This substance is composed of (*a*) a plasma rich in albumen, mingled with very minute and very numerous granules of coagulated albumen; (*b*) cells and nuclei, the latter being either compact and dotted over with granules, or being vesicles with one or two nucleoli (the latter form occurring in fishes, and in man and mammalia during the early period of life); these nuclei either lie freely in the midst of the glandular mass, or they have an envelope, and the surface of this is often so condensed as to form a cellular membrane: all the cells of the suprarenal bodies are formed in this manner around a mass of granules including a nucleus; (*c*) numerous fatty particles: in many animals, such as the carnivorous mammalia, birds, and batrachia, a layer of fatty particles closely envelopes the cells.

4. The glandular vesicles are themselves the result of the development of simple cells. The nuclei multiply themselves by endogenous generation, probably by successive divisions of the primitive nucleus; and the enveloping cell-membrane, being distended, becomes the glandular membrane. We are thus acquainted with three modes of formation of glandular cavities; (*a*) by fusion of cells; (*b*) by intercellular spaces; (*c*) by the increase and distension of simple cells.

5. New vesicles are continually being developed from cells, and the old ones successively disappear.

6. A vascular network surrounds the glandular vesicles.

7. In all vertebrata, excepting the mammalia and man, the glandular vesicles form the entire substance of the organ. But in the mammalia and in man, the suprarenal body is composed of two substances, of which the cortical alone includes vesicles; in the horse, however, they are found in the medullary substance likewise. In the cortical substance the vessels are generally elongated, and disposed end to end; and from this arrangement they frequently resemble tubes. The medullary substance is a network of conjunctive fibres, of vessels, and of very numerous nerves. The interstices of this network are occupied by a material similar to that which is contained in the vesicles of the cortical substance.

8. In serpents, the suprarenal bodies have afferent as well as efferent veins; being supplied with blood from the same source as the portal system of the liver.

9. In man alone are the suprarenal bodies more developed during the early period of life.

10. The elements of the gland furnish a fluid rich in protein and in fat, destined to be discharged into the vascular system, either by exosmose, or by the dehiscence of the glandular vesicles. Its use has reference to the general function of nutrition.—*Med. Chir. Rev. from Annales des Sciences Naturelles.*

PATHOLOGY AND PRACTICAL MEDICINE.

On the Pathological Changes in Mucous Inflammation. By RUD. VIRCHOW.—All inflammations are to be considered as alterations of the nutritive process, by which the plasma of the blood is thrown out of the vessels in increased quantity. In inflammations of mucous membranes, their anatomical relations cause the exudation of this plasma upon a free surface. The plasma itself may be unchanged in constitution, or its fibrin may be increased in quantity. Differences in the constitution of the plasma determine differences in the result; and thus are established three leading forms of mucous inflammation:

1. *The Catarrhal Form.*—In this the quantity of the blood-plasma is in-

creased, and thrown out on the free surface. The cells (of epithelium) are formed in greater quantity than normal; but they do not reach their normal development, being replaced constantly by an increased succession of new ones. The richer the plasma, the more rapid is the self-development. In the so-called *chronic catarrh*, there are frequently found in the fluid cells quite perfectly developed, of the aspect of the ordinary epithelium. In acute cases the cells do not reach this stage of development; they do not take on the epithelial forms characteristic of the part, but are thrown off as round, more or less spherical, mostly single-nucleated cells (mucous corpuscles.) In the very acute, particularly the blennorrhagic forms of inflammation, almost all the cells are found in the earlier stages of development, smaller, more delicate, and containing often three to five nuclei; in short, possessing all the characters of the ordinary pus-cell. All these forms may be considered as different grades of the epithelium cell; or, if the name *epithelium* be dropped, as cells developed on the surface of a mucous membrane, and whose only difference is their different degree of development.

2. *The Croupous Form.*—In this the plasma is not only increased, but is also altered in constitution, containing a large amount of fibrin, and coagulating more or less completely. The coagulum lies free on the surface of the membrane. This form is most frequent in the respiratory mucous membrane. The false membrane is either softened, friable (as in tracheal croup,) and contains many cells; or it is of a more firm and fibrinous character (as in bronchial croup and exudation into the air-vessels, or true pneumonia,) and contains the products of rupture of the capillary vessels, red and colorless blood corpuscles. In pneumonia the stage of hepatization, where the air-cells are filled with firm coagulated exudation, is generally succeeded by that of purulent infiltration, in which cells in every grade of development are formed in great abundance. In the first stages these cells have various degrees of resemblance to pus or epithelium; in the stage of resolution of pneumonia, we find the air-cells full of granular cells and masses, or a finely granular emulsion, which are to be considered as the retrograde steps of the newly-formed cells.

3. *The Diphtheritic Form.*—In this the exudation consists of nearly dry coagulated amorphous fibrin, and is infiltrated into the tissues composing the superficial layer of the mucous membrane, or rather of the submucous cellular tissue; for when it projects from the free surface, it is generally covered by the epithelial layer. Where organization proceeds in this kind of exudation, it is generally very imperfect; more commonly it is entirely absent, and a superficial slough is formed. Hence this form has been rightly considered as allied to a gangrenous form of inflammation; it is, in truth, closely allied to hospital gangrene.—*Archiv für Pathologische Anatomie*, &c. Band I. Heft. 2.

[We shall take another opportunity of adverting to these opinions, as well as to other views enunciated in this able journal. In the mean time, we may state that we may agree in many of our author's conclusions, although differing from him in some points; as, for instance, in regard to the constitution of the blood plasma, which we believe to be *least* altered where the fibrin is in greatest quantity, as in the croupous and diphtheritic forms; and *most* altered where, as in the catarrhal forms, the inflammatory phenomena are but a slight alteration of the ordinary secreting process. We believe that the membrane, in its healthy state, possesses a power of selecting from the blood-plasma a new product—mucus; that in disease the nature of this product is changed, and assimilated more and more to the plasma of the blood; in other words, that while the vessels acquire an increased power of pouring out the elements of the blood-plasma, the power of the membrane to alter and select from these elements is diminished.]—*Monthly Jour. Med. Sciences.*

Characters of the Urine in Bright's Disease. By A. B. Garrod, M. D.—In the early stages, or acute form of this disease, albumen appears to be thrown out, in addition to the ordinary urinary constituents, and with it we frequently find the coloring principles or globules of the blood. Hence the specific gravity is usually high, the amount of secretion diminished, and frequently a deposit of urates takes place on the cooling of the fluid. Even in this stage, however, the urea is deficient; at least, the total amount eliminated in the twenty-four hours; and this principle is found to be retained in the blood. As the disease advances and becomes chronic, the character of the urinary secretion greatly alters, the albumen often becomes less in amount, and the total quantity of solids is also much diminished, and hence the urine is of low specific gravity, paler in color, and generally slightly opaline, an appearance due to the suspension of certain insoluble matters consisting of the cylindrical lining of the urinary tubules, fat globules, epithelium scales, etc.; these, by standing, form a light flocculent deposit; the persistence of these bodies in the urine may be almost regarded as pathognomonic of the disease; although temporarily, they may occur in any affection in which there exists an irritated or congested condition of the kidneys. The quantity of urine excreted in the twenty-four hours is generally very deficient, and its relative amount, compared with the total solids, is also much lessened. It is in these cases that we find abundance of urea in the blood and effused fluids, the kidneys having lost their power of eliminating this body. The amount of watery excretion may be either large or small; sometimes it considerably exceeds the normal average, at others it falls far short of it, and in the last stages the urinary secretion may be totally suppressed. In the following table two analyses are seen, taken from Becquerel, showing the amount and characters of the urines in two cases of the disease.

	I.	II.
Amount of urine in twenty-four hours	28 oz.	78 oz.
Specific gravity	1016·3	1008·4
Water	965·0	986·3
Urea	11·6	1·8
Uric acid	0·3	0·2
Extractives	4·6	5·5
Fixed salts	6·6	2·9
Albumen	11·9	3·4
	1000·0	1000·0

Albumen is stated occasionally to occur in the urine after the ingestion of certain articles of diet, as pastry: also after the administration of mercury, and the application of blisters of cantharides. Of the power of the first-named cause I have never seen an example, and that mercury by no means frequently produces such a state of urine I have had ample proof, although, in Bright's disease, salivation is often readily produced by this mineral, which may have led to the opinion of its having caused the presence of the albumen in the fluid. The application of blisters appears sometimes to cause albuminous urine, probably from irritating the kidneys, and we know that hæmaturia also is at times thus produced.—*Lancet.*

Chloroform Inhalations in Cholera. By WILLIAM ROBERTSON, M. D.—Chloroform inhalations, it was not unnatural to suppose, would be found of considerable efficiency in at least removing the painful sensations of the patient during an attack of cholera. Most marvellous accounts of their efficacy in removing the most formidable symptoms of cholera have been published, and most unaccountable it seems to me, that in a large number of experiments undertaken while strongly prepossessed in favor of the remedy, conducted with considerable patience, and all the precautions conceived necessary to insure success—conducted, moreover, in a public hospital, and before the eyes of many observers of acknowledged accuracy—I should have totally failed in achieving similar delightful results. Truth compels me to state, that although chloroform has done much for the *comfort* of my cholera patients, it has done nothing for their *cure.* The cramps and urgent vomiting cease under its use, but recur whenever the patient awakes; and, although the soporific influence be maintained for hours by repeated inhalations, the result is still the same. The acts of vomiting and purging cease for a time, but the fluids are nevertheless still collecting in the stomach and bowels; the pulse becomes smaller and smaller, till it finally ceases to be felt at the wrist; the respiration becomes slower, the temperature of the surface sinks, as in too many cases of fatal collapse, and death closes the scene. I confess it seems to me probable, that chloroform inhalations, when administered during a profound state of collapse, may precipitate the fatal event by diminishing the frequency of the respiratory movements. While I deny the drug all claim to the title of a specific in confirmed cholera, I do not deny its efficacy in removing the earlier and more painful symptoms of the disease, nor decry the propriety of using it at any period when the cramps are severe.—*Month. Jour. Med. Sci.*

On Delirium in Pneumonia.—By M. Grisolle.—This phenomenon is of importance, not only because it may arise from different causes, offering opposite indications, but also because it may, in some cases, give rise to the belief in the existence of a cerebral disease, when in fact the affection is seated in the lungs. And the necessity of a complete examination of the organs is shown by the fact, that where this has been neglected, it has not uncommonly happened that persons have been carried to lunatic establishments on account of a temporary mania, developed during the acute stage or the resolution of pneumonia.

A third part of such cases manifest themselves in persons addicted to drinking; and it has been said that pneumonia of the apex especially gives rise to this symptom; but of 27 patients exhibiting delirium, M. Grisolle has found the apex affected in 9, the base in 14, and the middle lobe in 4; and MM. Andral and Briquet have made similar observations. It may, however, be stated, that double pneumonia is more likely to give rise to delirium than single. It manifests itself more frequently in men than in women, in the proportion of 21 to 6, and of these 27 patients, 3 only were less than forty years of age—the usual age being between 50 and 60. MM. Hourmann and Dechambre state that among the old women at Salpêtrière, delirium is an habitual accompaniment of pneumonia. The symptom generally occurs from the 4th to the 6th day, especially in drunkards, although it is by no means rare to find it at the commencement of the pneumonia, or even preceding it by from one to four days. Lastly, when the progress of the pneumonia has been rapid, it may not exhibit itself until the decline of the disease, or during convalescence.

It may assume various forms, from slight incoherence to furious delirium; and in drunkards there are the hallucinations, excitement, sleeplessness, and tremor, observed in *delirium tremens.* This last form, if not relieved, terminates in coma and death in 4 or 5 days. The autopsy generally exhibits only some vascularity of the pia-mater and injection of the cerebral substance, signs of recent meningitis being observable in about a fifth of the cases. The presence of this delirium gives rise to an unfavorable prognosis, not only on its own account, but because of its generally being conjoined with extensive pneumonia; but the prognosis is less serious in the case of drunkards than in others. Of 27 cases, M. Grisolle lost 8.

Although in the *treatment* of the case which has given rise to these remarks, bleeding was not resorted to, in consequence of the age of the patient, the long duration of the disease, and the smallness of the pulse,—antimony and a blister being successfully substituted,—yet it is, in general, far from being contra-indicated. When the delirium seems to predominate over all the other symptoms, M Récamier has given musk, in the form of pills, in doses of from 8 to 10 decigrammes, with success; but M. Grisolle has frequently failed with it. In the cases of drunkards, full doses of opium, continued until sleep is procured, are indicated; with which full doses of tartar emetic may be advantageously combined. Alcoholic drinks are also highly useful, not only for the cure of the disease, but also, as M. Chomel long since observed, for its prevention. We should therefore inquire into the patient's habits, and remembering that in drunkards delirium comes on from the 5th to the 7th day, we should, if any trembling of the lower lip and sleeplessness indicate the approach of the complication, at once administer the alcohol, and often the best effects will follow.—*Med. Chir. Rev. from L'Union Médicale.*

Influence of Russian Vapor-baths on the Cholera.—Of all the means employed against cholera, one of them from which the most efficacy is derived, is the vapor-bath. In some cases it has produced the most advantageous results in Russia, where its use is more generally adopted than in our climate. In the report of the medical commission, sent to Petersburg in 1830, we see that in the hospital of the hemp merchants, which contains all the materials for vapor-baths, out of forty cholera patients submitted to that treatment, six only died. Dr. Minchowsky, chief physician to the establishment, having, at the request of Drs. Barry and Russell, heated and fitted up the baths with vapor, as in the case of receiving patients for the cholera, two servants belonging to the hospital were sent with a thermometer for the purpose of measuring the degree of heat. In the space of three minutes the thermometer mounted, in the most elevated part of the building, to 46° Reaumur's scale, and in seven minutes it rose upon the bench where the patients were placed, to 58° 12. Dr. Minchowsky, when a patient was brought in suffering under a severe effect of frost, placed him in the bath extended on the bench, and, after rubbing him with divers substances, applied the vapor of water and vinegar, until the circulation was restored, or until all hope of saving life had vanished. A patient who was at the last extremity, after being three hours in the vapor-bath at the high temperature, was restored to life. One of the physicians belonging to the commission, gives an interesting description of the vapor-baths in Russia, and the sensations he experienced, when he tried the effects on his own person.—*Med. Times.*

Ergot of Rye a Remedy for Excessive Dilatation of the Pupil from Belladonna.—M. Comperat has announced a plan by which he has succeeded in removing dilatation of the pupil produced by belladonna in a patient of his, in whom the iris was scarcely visible, so complete had been the action of a small dose of belladonna applied externally. For some days the excessive dilatation resisted the employment of various collyria. He prescribed powdered ergot of rye, taken like snuff. The dilatation disappeared in a few seconds—it soon returned, the same remedy was again employed, and it did not reäppear. He thought that ergot might be thus used in cases in which dilated pupil arises from other causes.—*Med. Gaz.*

SURGERY.

On the Performance of Operations at Intervals. By M. Vidal.—M. Vidal recently read a paper at the *Académie*, in which he endeavored to show that advantage may sometimes result from performing the different stages of operations at intervals of some days. In this way may the economy be better able to allow of the removal of a long-standing disease, and the proceedings of nature are imitated. Thus, in the removal of foreign bodies from the vicinity of important parts, she protects these by adhesions and thickenings before she forms her external aperture. M. Goyrand, of Aix, has already acted upon the principle in *removing a loose cartilage from the knee-joint;* for, having opened the capsule by an oblique subcutaneous incision, he forced the foreign body into the external wound, and detained it there until the aperture in the capsule behind it was healed up. So also before *opening deep abscesses and cysts,* MM. Begin and Recamier have made preliminary incisions nearly down to the cavity, and have applied caustic, and left the discharge to nature, or have only effected this after protective adhesions have had time to form. Various practitioners have performed *lithotomy* at distinct intervals, first making all the incisions even into the bladder, and extracting the stone on another occasion; but the author is of opinion that the wound should extend down to the bladder, but *without opening it,* and be filled up with cerated lint, while the condensation of the neighboring cellular tissue is effecting, forming a kind of organic cement around the passage through which the urine will have to pass. This done, the bladder may be opened, and the stone removed without infiltration occurring. The author adduces several examples in which these principles have been advantageously acted upon in *autoplastic operations;* and refers to their especial importance in cases of recto-vaginal and recto-vesical fistula. The guiding principle is, that it is better to perform several, short, non-dangerous operations, than one long, complicated, and dangerous one.—*Brit. & For. Med. Chir. Rev*, *from L'Union Medicale.*

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Results of the Excision of Bone.—From the results of one hundred and eighteen cases in which he had practised excision of bones, Professor Gaetano Textor (a Bavarian) observes, that the operation is usually favorable as regards the upper extremities, but much less satisfactory as regards the lower extremities, especially when performed at the knee-joint. When the head of the femur requires to be excised, he insists particularly on the advantage of the operation being performed below the lesser trochanter; and he mentions one case in which, having pursued this plan, the patient, a young man, was subsequently enabled to walk without any additional support, and with almost perfect facility.—*Med. Gaz. from Gazette des Hôpitaux.*

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Treatment of Hemorrhage after Excision of the Tonsils.—M. Hatin having met with a case of most alarming hemorrhage after the excision of a hypertrophied tonsil, which resisted all the usual styptics, an ingenious and successful mode of employing compression occurred to him. He took a long straight pair of forceps, used for the removal of polypi from the posterior nares, and having covered one of the blades with amadou and lint, applied it to the bleeding part, applying the other blade externally to the angle of the jaw, any amount of compression being producible by approximating the handles. M. Malgaigne, to whom the account of the case was sent, refers to a discussion which took place upon the same subject at the Surgical Society. In the case which gave rise to it, M. Chassaignac succeeded, after everything else had failed, in arresting the bleeding by holding a piece of ice by means of a forceps in constant proximity to the bleeding point. M. Guersant had met with three cases, one in the adult, stopped by the actual cautery; one of the two children had a hemorrhagic tendency, and in the other an alarming hemorrhage occurred on the third day. Muriatic acid and honey succeeded best, ferruginous prepartions being given internally. In the only case met with by M. Huguier, he found *ice-drinks* suffice. M. Robert doubted the propriety of using ice in these cases, as it has sometimes produced a gangrenous eschar. He recommends that the thumb dipped in alum should be applied to the bleeding point, making corresponding pressure with the fingers externally. M. Monod was acquainted with cases in which the mere keeping the mouth open sufficed to restrain the hemorrhage. M. Malgaigne observes that he has never known hemorrhage follow either excision of the tonsil or of the uvula. Lisfranc, however, met with a bad case of the latter, and arrested the bleeding by compressing the part with a forceps, and applying nitrate of silver to the wound. M. Malgaigne has met with two cases of traumatic bleeding from the fauces. In the one, it succeeded the removal of a tumor, and was arrested by the application of the finger for a few minutes. In the other case it followed the division of an abnormal adhesion of the *velum palati*, which completely obstructed the nasal fossæ; and the bleeding was only controlled as long as pressure was kept up. Believing that the obstruction of respiration contributed much to the continuance of the hemorrhage, M. Malgaigne rapidly completed the operation, and the passage of air being now free through the nares, the bleeding stopped as if by enchantment.—*Med. Chir. Rev. from Rev. Méd. Chir.*

Amputation of the Thigh at the Hip-joint.—M. Guersent operated, on the 28th December, 1847, for a cancerous affection of the femur by disarticulation at the hip-joint. The child, aged 5, was very much reduced. He was put under the influence of chloroform—insensibility was complete in two minutes. The operation lasted only two minutes. When the ligature was being placed on the vessels the child became pale, a little foam came from the mouth, the eyes were turned up, and the pulse at the wrist disappeared. The state of syncope was dissipated by means of active ventilation, and the introduction of a few spoonfuls of wine into the stomach—and the child began to cry, much to the relief of the surgeon. Twenty-two days after the operation the child was as well as possible.—*Prov. Med. and Surg. Journ from Journ. de Méd. et de Chir.*

Deaths from Chloroform.—[We gather the following from different foreign journals, and publish them, to induce our readers to exercise caution in the use of an agent at times so fatally active. These cases are in addition to those published in our May number.]

1. In July a case was reported to the French Academy of Medicine, in which M. Gorré administered fifteen or twenty drops of chloroform, on a handkerchief held under the nostrils of the patient, a female, aged 30, previous to enlarging a fistula, for the purpose of extracting a foreign body from the thigh. After a few inhalations, the woman cried out she was suffocating; her face became pale, froth appeared at the mouth, and she became insensible. The handkerchief was immediately withdrawn, but every effort failed to rouse her from the state of inanimation into which she had fallen. She never showed any sign of life after the exclamation. On examination after death, a quantity of air was found in the veins; the blood was very fluid, and very dark, almost black, in color.—*Rev. Med. Chir. de Paris, July*, 1848.

In this case the cause of death appears clear, although MM. Velpeau and Roux doubted whether the death could be attributed to chloroform.

2. A case was reported by M. Robert at the subsequent meeting. The operation to be performed was disarticulation of the thigh at the hip, for compound fracture of the femur by a ball. The chloroform vapor was inhaled from a bottle of peculiar construction, and the operation commenced as soon as the patient was under its influence. A very small quantity of blood was lost; but after the formation of the anterior flap, the patient beginning to return to consciousness, a renewal of the inhalation was ordered, and the operation continued. In a quarter of a minute the respiration became stertorous, the inhalation was discontinued, and the operation suspended. The patient's face was now very pale, his lips discolored, eyes upturned. Every effort was made to restore him, but the respirations became infrequent and sighing, the pulse at the wrist ceased to beat, the limbs were perfectly relaxed, and, although the

respiration and pulse seemed to return several times, he died after three quarters of an hour.

M. Robert attributed the death to the chloroform, although he thought the stupor and nervous depression which accompany gun-shot wounds, and the gloomy state of the patient may have contributed to the result.—*Ibid.*

3. An inquest was held by Mr. Wakley over the body of Mr. B——, of London, who died after inhaling chloroform, previous to having a tooth extracted. It appears from the evidence that the inhaler containing the chloroform was held at a little distance from the mouth; that the vapor had been inspired only one minute, when the head and hand of the patient dropped, and he became insensible; every effort failed to rouse him from this state. The jury returned a verdict that he died "from the mortal effects produced by the inhalation of chloroform upon a heart extensively diseased, and greatly obstructed in its action by a liver much enlarged beyond its natural size.—*Lancet, July* 8.

4. A surgeon in the East Indies administered a drachm of chloroform to a young woman, previous to the amputation of a finger; the chloroform was sprinkled on a handkerchief, and the vapor inhaled. She coughed a little, and then made a few convulsive movements. After the operation, which only occupied a few seconds, the patient was placed in a recumbent position, and active means were resorted to bring her from a state of coma, into which she had apparently fallen, but she never breathed again. The death must have been instantaneous, for she never moved, nor showed the smallest sign of life after the convulsive movements described. There was no post-mortem examination.—*Lond. Med. Gaz., for July.*

There can be no doubt that chloroform caused the death in this case.

5. M. Malgaigne lost a patient just as he had completed disarticulation at the shoulder-joint. Mr. Wells, who mentions this, ascribes the death to the chloroform which had been administered, although M. Malgaigne does not.—*Ibid. for August.*

The cause of death in this case is doubtful.

Char. Med. Jour. and Rev.

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Operation for Hare-lip.—M. GUERSENT, who has had extensive opportunities of judging of the most favorable period for operating in hare-lip, gives the preference to the period recommended by Dubois, during the first fortnight after birth. He advises against undertaking the operation when the child is about a year old, or during the process of dentition. It may again be performed with much greater hope of success when the child has attained the age of five or six years. Dieffenbach latterly gave a similar preference to the early operation.—*Monthly Jour. Med. Sci. from Gaz. des Hôp.*

MIDWIFERY.

Prolapsus of the Funis, at the second month of Pregnancy.—Mr. I. B. Brown related to the Westminster Medical Society (Oct. 21) a case of this rare phenomenon. The subject of it was thirty years of age, and the mother of three children. She was threatened with abortion, and after two or three attacks of hemorrhage, attended with expulsive pains, in one of these the cord was found to be presenting in a loop. The following day a severe pain came on, and the cord burst. This was followed by profuse hemorrhage, and the expulsion of the fœtus. The placenta was found to be nearly bloodless. In consequence of the severe pain experienced in removing the placenta, the patient was placed under the influence of chloroform. It was quite successful, and she is doing well.—*Lancet.*

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Sore Nipples and their Treatment. By Drs. M'CLINTOCK and HARDY.—Sore nipples may not only incapacitate a woman from nursing—a deprivation in itself often sufficiently grevious—but they may, as we have before observed, give rise to mammary abscess, from an extension of the inflammation backwards, along the ducts, to the substance of the gland. This, in point of fact, is the great danger to be apprehended, and every other consideration should give way to it.

When there is reason to dread such a result, the child is entirely withheld from the affected breast, which is kept soft by rubbing, and if the nipple itself appear to be the seat of any inflammation, a bread and water poultice is applied to it.

Of the various topical applications for sore nipples employed in this hospital, it may be well to mention two or three whose value has been established by long experience.

Among these the tincture of catechu holds a high place, and has been found a very excellent astringent; like the other remedies of this class, it is best adapted for the simply excoriated or abraded nipple. Nearly similar to it is the solution of pure tannin, so highly recommended by Mr. Druitt. It is made by dissolving five grains in an ounce of distilled water. We have not observed it to possess any superiority over the catechu, except in being more cleanly. The following is a favorite lotion with Dr. Johnson, who has been in the habit of using it for many years:—℞. Sub-borat. sodæ, ʒii.; Cretæ precipitat. ℥i.; Spiritis vini, Aquæ rosæ, āā ℥iii. M. fiat lotio.

This may be applied alternately with the following ointment, or the latter may be used alone :—℞. Ceræ albæ, ʒivss.; Ol. amygdal. dulc. ℥i.; Mellis despumat. ℥ss.; Dissolve ope caloris, dein adde gradatim, Bals. Peruviani, ʒiiss. M. fiat unguentum.

In some cases we have seen benefit result from the use of tincture of galls and compound tincture of benzoin (Friar's balsam,) in equal proportions.

It is always well to have in mind a number of these different preparations, for it not unfrequently happens that one will answer our purpose when others have failed. For fissured nipples some authors strongly advise the application of solid nitrate of silver; but our experience does not permit us to speak of it Dr. Johnson thinks it is sometimes a good remedy in such cases, at a remote period of delivery; but that during the puerperal state its use is not advantageous, as it is apt to be followed by mammary abscess.—*Practical Observations.—Lon. Med. Gaz.*

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Case of Retention of the Fœtus in the Uterus for Eleven Years.—By Dr. Vondorfer.—This woman was forty-nine years of age, and had already borne two children. She was busily threshing corn, when she was seized with violent pains in the back, resembling those of labor. After they had continued for two hours the waters broke and they were discharged. For fourteen days she lay almost entirely upon her knees and elbows. At the end of this time the pains had almost ceased, but still in lying on her back she kept her knees well drawn up. Three weeks afterwards she was seized with a flooding, which was easily stopped. After this, there was a constant fetid discharge from the vagina, which continued more or less for eleven years, and occasionally some fœtal bones were discharged with great pain. During most of this time the woman was able for her work, and in good health. At the end of eleven years she was again forced to betake herself to bed, and she died, after some time, with the symptoms of purulent infection. On dissection, the uterus was found adhering to the anterior wall of the abdomen, and it contained the remains of the putrefied fœtus, along with its numerous bones.—*Monthly Retrosp., from Schmidt's Jahrbucher.*

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On the Introduction of Premature Labor in other cases than Contraction of the Pelvis.—By M. Paul Dubois.—M. Dubois relates some of the particulars of the case of a woman advanced 7½ months in pregnancy, who became attacked with so severe a bronchitis, that he was on the point of inducing premature labor, when at last the inflammatory disease yielded. Labor nevertheless did come on, dilatation having, as ascertained by examination, already taken place unpreceded by pain—an argument in favor of interference in these cases.

The modifications induced in the organism by pregnancy are of two kinds, anatomical and functional. Some of these are constant and essential, as all those connected with the increase and development of the uterus; while others are variable, such as the different sympathetic disturbances. Although in the great bulk of cases these last may remain within certain limits, yet at other times they proceed to so dangerous an extent, as to call for the induction of labor. Then there are certain diseases, the severity of which is much added to by the mere fact of their occurring during pregnancy; their aggravation being sometimes quite mechanical, and at others physiological. The following propositions may be laid down: 1. Premature labor is induced with the greater probability of success, in proportion as the morbid states against which it is employed are the more intimately connected with pregnancy, and depend more directly upon it. 2. Success is the more probable, in proportion as the circumstances for which the operation is instituted more generally and more certainly disappear on the cessation of pregnancy, whether induced artificially or spontaneously. 3. The operative procedures must be simple and easy of execution, and must not of themselves add in any way to existing dangers. 4. From the above it may be concluded that, all things else being equal, premature labor is more favorably induced in the morbid conditions *of* pregnancy than in those occurring *during* pregnancy. In the present question, the *viability* of the child does not occupy our attention, as it does in the case of narrow pelvis; for some of the diseased conditions, as obstinate vomiting for example, may occur at a very early period of gestation.

Among the *anatomical modifications*, M. Dubois enumerates the following: 1. *Increased size of the uterus from excess of liquor amnii.* This sometimes gives rise to much general disturbance, severe pain, general anasacra, and intense dyspnœa. Interference is, however, rarely called for; premature labor generally occurring spontaneously. In a case occurring to M. Duclos, in a woman seven months advanced, he evacuated fourteen pints of fluid at several intervals. 2. The uterus may only undergo its normal development, and yet become a source of danger, as when any tumor in part occupies the abdomen, or there is great deformity of pelvis. In these cases, too, labor generally occurs spontaneously. 3. Retroversion of the uterus may call for the induction. It may in some cases be produced accidentally, but generally depends upon some prior existing disposition. It may give rise to severe pain and other urgent symptoms, even in the fourth or fifth month, and these are continually augmented during the development of the organ. Retention of urine is one of the first of these, and the compression of the rectum may induce strangulation. Reduction should of course be attempted, but in some cases this will be found impossible, and the evacuation of the contents of the organ become necessary. In some cases, the introduction of an instrument into the cavity of the organ has been found impossible, and perforation of its substance has been resorted to, sometimes with success, sometimes with fatal results. 4. Certain copious hemorrhages due to the implantation of the placenta at or near the os uteri, call for the operation.—*Brit. & For. Med. Chir. Rev., from Gaz. des Hôp.*

On the Treatment of Cauliflower Excrescence of the Uterus. By Dr. Renaud.—The treatment resolves itself, first, into operation with intent to cure, either by ablation of the cervix uteri, ligature around the base of the tumor or by caustics locally applied; secondly, into a palliative treatment, without intent to cure, but with intent to prolong life, reduce pain, and render more endurable the miseries that in this disease so thickly bestrew the passage to the grave.

That the cervix uteri may be excised with moderate safety to the patient has been long proved by the surgery of M. Lisfranc, who performed the operation some ninety-nine times for various diseases, and with recovery to the major part of his patients. If, therefore, cauliflower excrescence be found implanted on the os uteri, and there be no wide-spread induration of the cervix, or enlargement of the body of the uterus, neither any ovarian tumors, there is very good reason to expect that excision of the cervix uteri will be attended with present relief to the patient, and at the same time, afford her a probable chance of recovery. From evidence already in possession, it would appear that the chances are greatly in favor of a return of disease to the uterus or of appendages in the form of cerebriform cancer. Dr. Simpson has nevertheless recorded a case of this disease on which he operated by excising the uterine neck so successfully, that five years afterwards the woman remained in good health, and, in the interval had given birth to, and suckled, three healthy children. Dr. Montgomery also had a case of this disease, for the cure of which he had removed the cervix, and the woman had remained well at the time of writing—viz. three years after the operation.

The more common practice, as being the more easy of adoption, and the less attended with dangerous consequences, has been the passing a ligature as near round the base of the tumor as the peculiarity of its shape will admit. This operation does not appear to be attended with any common risk to life, and the greatest inconvenience to be expected from it is the fœtor of discharge, and sphacelus consequent upon the tedium of separation. Accordingly as the tumor is more or less dense, and the ligature aptly applied, will be the duration of time necessary to the complete separation of the parts. Twelve days may be allowed as a maximum time for the accomplishment of this purpose, and three or four days a minimum. On the ligature coming away, the parts may be allowed to remain quiet, or corroding substances applied to the cervix of the uterus, with intent the more completely to destroy the root. Amongst the best of these will be found the potassa fusa, nitrate of silver, fluid nitrate of mercury, or plain nitric acid. All or any of the foregoing may be directly applied to the neck of the uterus, through the speculum, with the most complete impunity.

A third method of destroying the excrescence is by means of caustic substances applied to it twice or three times a week. For this purpose the solid nitrate of silver, or a very strong solution, may be used, and used freely. If the tumor be large, as much as a quarter of an inch of caustic may be melted down on its surface, and within its interstices; or I have allowed as much as a drachm or two of the strong solution to infiltrate into the tumor through the speculum. This treatment, when regularly continued, does not fail shortly to develop the root of the fungus; and thus, by cutting off the mass of the disease, reduces the wasting discharges, and gives the patient time to rally. I would prefer this plan of treatment to ligature, because it gives no more annoyance, perhaps less, to the patient than it; and, moreover, does away with the offensiveness of the discharges, besides being a more gradual process.

Taking a view of the disease as cancerous, one grave objection may possibly apply to the ligature and caustics in common—viz. that the same malignant action being repressed on a free surface, will have a corresponding tendency to repeat itself within the tissues of the part on which it is implanted, and spread itself by simple extension, or be found as secondary cancerous masses in remote parts of the body. Thus, while a real good may appear to be effected on one part, a more than corresponding evil may be ingrafted on another.

With regard to the operation of complete excision of the cervix, the same rule will apply as that in force concerning hæmatoid fungus, viz. the complete ablation of the diseased part,—an operation the performance of which, under favorable circumstances, would appear always just, on the principle of obtaining a present good, rather than delaying for fear of a contingent evil. It is true that excision of the os and cervix uteri has fallen into much disrepute, and for the reason probably that numbers of such operations have been performed unnecessarily, injudiciously, and not seldom for the removal of mere functional engorgements capable of cure by therapeutic means.

After any of these operations, it would seem politic to have recourse to occasional local abstractions of blood, and to place the patient on a long course of alterative medicines, recommending, in addition, pure air, moderate exercise, and cheerful associations.—*Med. Gaz.*

On the Management of Still-born Children.—The management of suspended animation in new-born children is a subject so well understood, and the principles upon which it should be conducted are now so clearly recognised, as to render any lengthened observations thereon wholly unnecessary in a work like the present. The following short description, therefore, of the practice of the Hospital in this class of cases (not the least important or interesting to the accoucheur) is purely confined to practical details, especially such as relate to the use of the *stethoscope* and of *artificial respiration.*

When a child, immediately after its birth, exhibits none of the ordinary signs of vitality, such as respiratory efforts, or muscular contraction, the question will at once suggest itself, does life yet remain—is there still a possibility of restoring animation? We hesitate not to say that the most accurate information upon this point is to be derived from the stethoscopic examination of the heart, for we have seen very many children resuscitated with whom the *cardiac pulsations as detected by mediate auscultation,* had been the only proof of lingering vitality. What the effect of such evidence should be on the physician's conduct we need not at this moment stop to inquire; but it would undoubtedly prove a source of much encouragement under circumstances otherwise apparently hopeless, and at a time when he must be oppressed with the consciousness that the result of his endeavours is awaited with the most intense anxiety and solicitude. We have seen many infants restored to animation in whom respiration was for a long time suspended, yet we never saw a single instance where the slightest symptoms of vitality could be produced if the heart's pulsations had ceased to be audible when the child was born. It may be asserted, without fear of contradiction, that had the stethoscope been used, no such accident could ever have happened as a doctor ordering an infant to be removed as dead which afterwards recovered without any assistance. Let it not be supposed, from the preceding observations, that we would recommend any innovation upon the rule that resuscitation should *always* be attempted in the absence of the signs of decomposition; to the excellence of this precept we give our full concurrence.

Children laboring under suspended animation at the time of birth are found to present very different external appearances, which, it may be supposed, are regulated by the extent and kind of lesion the vital functions have sustained. Now we think that, setting aside physiological considerations, and looking solely to practice, all these cases may be conveniently arranged in two classes, whose characteristic features are drawn from the general condition of the infant. In the one case the child is pale and perfectly flaccid; the eyes are closed; there is complete relaxation of all the muscles; great flexibility of the joints; and the finger can be pressed into the pharynx without any opposition being felt. In this form, which we are inclined to think is, perhaps, the more dangerous of the two, the state of the child closely approximates to syncope, as there seems to be a failure or deficiency of the vital principle.

In the examples of the second class, the outward appearance of the child is totally different, and would seem to be the result of great cerebral congestion or apoplexy. The surface of the body is apparently swelled, and of a red or livid color, and both these characters are most remarkable in the face and neck; the eyelids are generally apart, and the eye-balls prominent, with more or less injection of their conjunctival membrane. There is seldom that extreme mobility of the limbs and flaccid state of the muscles that we see in the former class of cases. This state of the fœtus was very apt to occur where the umbilical cord had tightly encircled the neck, or where the expulsion of the body did not take place for some time after the head.

Should the child not begin to breathe immediately after its birth, sprinkling the chest and face with cold water generally proved a most efficient means of stimulating the respiratory muscles, and exciting sensibility. This is a measure, however, which cannot be persisted in after the first or second trial, as it is of too depressing a nature; on this account, also, it is not well adapted to the cases included in our first class. It was, of course, an established rule not to sever the connection between the fœtus and placenta as long as the pulsations of the cord continued distinct. If the child presented an apoplectic appearance, some blood (ʒiij. or ʒiv.) was allowed to flow from the fœtal end of the funis after its division. This simple mode of depletion frequently produced the most beneficial effects, relieving the oppressed state of the nervous system, and being speedily followed by signs of increased sensibility. If a sufficient quantity of blood could not be procured from the funis, the application of a leech to the temple was frequently attended with marked advantage. When the cord was long enough to admit of it, the warm bath was sometimes employed before cutting it. Smartly slapping the chest or buttocks is often resorted to with advantage in mild cases where the suspension of animation is only partial; but it will not, we think, be found to answer any good purpose if the infant be in a low state of vitality. Ammonia applied to the nostrils is an excellent restorative if there be any attempts at inspiration, so that it can be inhaled, but otherwise it is of no use. These efforts of the child to breathe will be very much assisted by compressing the epigastrium and sides of the chest with the hands, so as to empty the lungs of the inspired air as effectually as possible. In the first instance, and before adopting other measures, it is of importance to rid the mouth of any mucus that might hinder the entrance of air by obstructing the glottis. For this purpose Gardien recommends a pledget of lint dipped in a solution of common salt to be used. A flexible tube, with a pump attached to it, has also been employed; but we give the preference to the finger over every contrivance.

In every instance where the process of respiration was slow of being established, or very imperfect after two or more trials in the above restorative measures, artificial respiration was commenced, and continued, *with intermissions*, until the necessity for its further employment was superseded by the natural performance of the function, or until the gradual failure and cessation of the heart's action showed that all attempts at recalling the vital principle might be relinquished. We have said "with intermissions," because it was generally thought advisable to suspend the process for a moment or two at intervals, just to see if the failure of the supply of air to the lungs would stimulate the child to make an effort at inspiration. A gum-elastic male catheter, of the full size, (No. 9 or 10,) was the instrument used on all occasions for inflating the lungs. The child was placed in a horizontal posture, with the neck considerably extended, and the head bent rather backwards; the catheter was passed a short way into the mouth, and the lips and nostrils were then kept closely compressed, at the same time that the larynx was gently pressed against the spine, so as to favor the ingress of air into the trachea, and to prevent or obstruct its transmission down the œsophagus. Alternately with the insufflation of the lungs, a slight degree of pressure was made on the epigastrium and ribs, with a view to assist expiration. There was great difficulty with some children in directing the current of air down the trachea, and keeping it from distending the stomach. This was avoided by placing a hand on the precordial region, and altering the position of the head and larynx. During the process of inflation, which was repeated at short intervals in imitation of natural respiration, whenever the child made any attempt to breathe, the compression was instantly removed from the mouth and nose, in order to give every facility to the entrance of air. It was considered a point of importance, in blowing through the catheter, to do so in the manner of using the blow-pipe, namely, that the efforts should be made by the mouth and soft palate, and not by the chest; and consequently, that the air should come from the mouth, and not from the lungs of the operator. This mode of inflating the lungs of still-born children is, we conceive, open to fewer objections than any other. In the first place, the degree of force with which the air is propelled can be carefully regulated: secondly, its temperature is raised before entering the chest of the infant: thirdly, in quality, it is little, if at all, removed from pure atmospheric air; and, lastly, no injury can possibly be inflicted on the soft parts within the mouth of the child. From our experience of this measure we must speak of its utility in terms of the strongest commendation, as we never could trace any evil effects from its employment, whilst in very many instances we have had every reason to believe that the child's life was preserved by its means.

The artificial respiration very constantly accelerated the action of the heart, where this was at all pulsating at the time of commencing the process; but we never observed that it restored in the least degree the cardiac movements after these had ceased to be perceptible. The recovery of the child did not, by any means, follow as a consequence of this improvement in the heart's functions; for, on many occasions, we have known the pulse to double its rapidity under the employment of this agent, but as soon as its use was suspended, the velocity of the circulation would quickly diminish, again to become raised on inflating the lungs; and thus we have seen matters go on alternating for two hours or upwards, and yet the great object of our exertions not be ultimately attained.

When, however, this increased frequency of the pulse is accompanied by other indications of vitality, such as restoration of the natural color to the surface, the efforts at respiration recurring at shorter intervals and with more strength, signs of muscular irritability in the limbs and face, &c., we may calculate, with tolerable certainty, upon a successful issue to the case.

The artificial process was generally left off as soon as natural respiration was at all established, or at least sufficiently so to maintain the heart's function in that state of activity to which it had been raised by the temporary expedient of inflating the lungs. As resuscitation can seldom be considered complete and satisfactory until the infant breathes naturally, or cries aloud, it was often necessary to proceed with the employment of restorative and invigorating remedies for some time after the discontinuance of artificial respiration. As soon as the child could swallow, small quantities of white-wine whey were given from time to time; or if it seemed very languid and feeble, a small enema containing a few drops of the fetid or aromatic spirit of ammonia was administered. But by far the most important point in the management of these weakly, delicate infants, or of such as are in a similar condition from having been born prematurely, is to support the temperature of their bodies by artificial means. For this purpose nothing answers so well as cotton wadding, being softer and warmer than flannel or any of the materials ordinarily used in the clothing of children.—*M'Clintock and Hardy's Practical Observations.*

MATERIA MEDICA AND PHARMACY.

On Emulsions of Castor Oil. By A. MANNE.—Having frequently to make emulsions of castor oil, either by prescription of physicians, or at the demand of my customers, making them in fact four or five times day, I found myself in a position to make researches relative to the best means of administering this medicine. * * * I have employed gum arabic in different proportions, but have obtained emulsions either too thick or imperfectly made. The yolk of egg has offered me an excellent emulsion, but one yolk is required for every ounce and-a-half of oil. Is it not possible that the yolk of egg injures the purgative effects of the oil by its nutritive properties? Does it not render the purgative heavier and less supportable by the stomach? These doubtful points lead me to doubt the utility of yolk of egg, and determined other attempts at finding a means of making a homogeneous emulsion. agreeable to the sight and more supportable by the stomach. To accomplish this I have had recourse to gum tragacanth, and the following formula has given the most satisfactory results:

Formula for Purgative Emulsion of Castor Oil.

℞.	Castor oil,	11 drachms.
	Powdered tragacanth,	1-2 drachm.
	White sugar,	75 grains.
	Water,	2 1-2 fluid ounces.
	Syrup of orange flowers,	6 fluid drachms.

Mix, and make an emulsion as follows:

Triturate the tragacanth with the sugar, then add the syrup and agitate rapidly in a mortar, until the mucilage begins to thicken a little, I then add the oil and continue to triturate until the mixture is homogeneous, and add the water little by little during the trituration. In this manner I have obtained an emulsion of castor oil which leaves nothing to desire, and which will remain eight or ten days without an atom of oil separating.—*Amer. Jour. Phar., from Jour. de Chimie Médicale.*

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Camphor and Chloroform Mixture. By T. and H. SMITH. (*Monthly Jour.*) —There is great difficulty, or rather an utter impossibility of administering camphor in a state of solution in doses of sufficient potency in some cases. The form of pill, the only mode of giving large doses of this medicine, is objectionable in many cases, and in others altogether inadmissible. The camphor, being merely in a state of mechanical division, on being set free in the stomach, from its extreme lightness quickly separates and floats about, thus producing in many cases much local irritation in the organ, instead of soothing or arousing the general system.

Messrs. T. & H. Smith, chemists, of Edinburgh, give a formula for exhibiting camphor in doses of almost any amount and strength—certainly as large as any case can require—and that in a state of perfect solution: thereby allowing of a nice adaptation of the dose to the circumstances of each case.

The formula is as follows:—Three drachms of solid camphor are dissolved in one fluid drachm of chloroform. This is, perhaps, one of the most remarkable cases of solution the whole range of chemistry presents to us. The solution is most *rapid and complete*, and the bulk of the liquid is now increased from one to four fluid drachms. This solution rubbed up with the *yolk* of one fresh egg, may be formed into an extremely elegant emulsion by the addition of water, without the slightest separation of the camphor or chloroform; in fact, no separation of any kind takes place. If to the proportions given above as much water be added as to make a four-ounce mixture, each teaspoonful of the mixture when formed will contain about five-and-a-half grains of camphor, and about two minims of chloroform. The capability of the formula being varied, so that either the camphor or chloroform may constitute the predominating ingredient, must be quite obvious. This mixture can be administered in any ordinary vehicle, such as water, without the occurrence of any separation; indeed, the mixture is as readily and completely effected as cream with tea or coffee. We have tried the effect of several medicinal substances on the mixture. With none of them has any separation been caused.

A weak saline solution, composed of common salt, phosphate of soda, and an alkaline carbonate, mixed readily, as well as a solution of muriate of morphia and sulphate of zinc. With the volatile alkali and acid liquids—such as a weak solution of acetic and muriatic acids—the mixture seems to become more intimate and stable. The mixture with ammonia has stood since its preparation—now fully a week—without any separation. With water alone, however, the chloroform solution of camphor separates in a few days, but they readily unite again when slightly agitated. The solution of camphor in chloroform, although insoluble in water alone, appears in this mixture to be in as complete a state of mixture as the butter, in milk when newly drawn from the cow.

The therapuetic value of the formula remains to be ascertained.

On the Utility of Trisnitrate of Bismuth in the Diarrhœa accompanying Phthisis.—By T. Thompson, M. D., F. R. S., etc.—The author considers the trisnitrate of bismuth to surpass in efficacy and safety our most approved remedies for this complaint. He has taken every opportunity, during the last twelve months, of testing its powers, and has preserved notes of twenty-one of the cases in which it was administered. Of these, eighteen were phthisis in various stages of progress, and three, bronchitis. In fifteen of the patients the diarrhœa was entirely removed; in four, transient benefit was experienced, and the remedy proved useless only in two instances. The dose administered was about five grains daily, usually combined with a little magnesia and gum arabic. Dr. Thompson has referred to various authors who have written respecting the properties of bismuth, without being able to collect from them any evidence of its powers in the phthisical variety of diarrhœa, but he entertains a strong conviction of its peculiar appropriateness to this affection, and has obtained important confirmation of his experience in a recent communication from Dr. Lombard of Geneva.—*Dublin Medical Press.*

Quinine as a Prophylactic in Puerperal Fever.—M. Leudet cites several cases which occurred during the prevalence of three different epidemics at Rouen, in which quinine, given in doses of five grains three times a day, and commenced with a few hours after delivery, seemed to exert a protective agency. On the third day, this quantity was diminished, and the drug left off about the sixth day. In those epidemics in which the disease commences very speedily after delivery, the quinine should be administered as soon as labor begins.—*Med. Chir. Rev., from L'Union Méd.*

MISCELLANEA.

Use and Abuse of Anæsthetic Agents.—Mr. James Braid, in an article in the *Medical Times*, (Aug. 19,) remarks: "Of all the revolutions which ever took place in regard to any medicinal agent, nothing so eventful was ever known as what has been evinced in the fate of anæsthetic agents. Their advent was hailed with universal enthusiasm, and seemed to be followed by unalloyed success. By their agency, a second Eden seemed to be dawning on fallen man, pain and peril were no longer to be the lot of those doomed to undergo surgical operations, and parturient women exulted in the assured confidence that they were redeemed from the pains and penalties of the primal curse, through the omnipotent powers of ether and chloroform.

"The rapidity with which these potent agents attained their culminating point of fame and favor is most remarkable, and not the least surprising point in my estimation, was this, that their almost universal adoption, and in many instances their being applied apparently with little care or caution, took place without the occurrence of dangerous or fatal accidents. For a considerable period all seemed a run of unalloyed success; but the tide has now turned, and instances of disaster and death are recorded as such frequent occurrences from the use of chloroform, as must soon issue in the entire abandonment of this agent by the profession, and the insurmountable dread of it by the public, unless we can arrive at some satisfactory solution of the true cause of the late unfortunate results, and determine the principles which ought to guide us in its future administration, so as to insure the blessing without the curse, of an agent which seems to be alike potent for good or for evil, according to the mode in which it is administered.—*Med. News.*

Minute Injections.—"Dr. Hershfield, who has become celebrated in Paris for the perfection of his minute injections, adopts the following method:—The subject being placed first in a bath for some hours, the following mixture is injected:—For the *arteries:* oil, one litre; vermillion, one and a half lbs. For the *veins:* linseed oil, two litres; white lead, 1 lb.; indigo, q. s. The addition of two tablespoonfuls of soft Venetian turpentine, renders the mixture as penetrating as possible."

State of Medical Education in Turkey.—[We are indebted to a medical gentleman, at present residing in Constantinople, for the following details. They point to the existence of a state of matters, of which very imperfect accounts have as yet reached this country; and such as, undoubtedly, is at once the proof and the earnest of a new era in the history of civilization having begun in the East].

"Military hospitals, on a large scale, are either built or a-building in every quarter of the Turkish Empire. There are about one thousand European surgeons attached to the different regiments, two hundred of whom are Jews. The chief professor of the Medical College, Dr. Spitzer, is a Jew. He is also one of the physicians in ordinary to the Sultan. By him I was introduced to H. E. the Hakim Bashy Ismael Effendi, the chief physician of the Ottoman empire, who kindly permitted me to visit the different lecture-rooms in the Medical College. It is certainly in a very flourishing condition, considering that it has been in existence only eleven years. The pupils are brought, by order of the Sultan, from all departments of the empire, and are lodged, fed, clothed, and educated, at the expense of the government. When qualified as physicians and surgeons, they receive appointments in the army and navy, with salaries of £200 or £300, and upwards, according to rank, without distinction of Jew or Gentile. Until lately, however, there were no Jews in this college: not that the government excluded them, on the contrary, they were invited; but that people, who have been scattered amongst all nations, yet amalgamated with none, would not send their sons to this medical establishment, even although the most flattering prospects of education and worldly advancement were held out to them. But the government condescended to smooth all the difficulties which stood in the way of the improvement of this section of its subjects. Through its agents, it held interviews on the question of consciencious scruples with the chief Jewish Rabbis: and the result was, not only the guaranteeing liberty of conscience to the Jews who should enter the Medical School, but the assigning to them a distinct portion of the college, so that they might live separate from the Gentiles, the appointment of a superintendent of their own persuasion, to see that their religious duties and services should be strictly observed—also a shocket, or butcher, of their own; and, in short, every arrangement was made to prevent their being constrained to do anything contrary to their conscience. In the language of last year's report of the college authorities,—'Toutes les difficultés ont été aplanies, et le Gouvernement n'a reculé aucune sacrifice pour exercer aussi son influence civilisatrice sur cette partie des sujets de l'Empire.' The Sultan lately visited the college, and presided at the examination of the candidates for the medical degree. When the pupils are first introduced to the college, they are, for the most part, raw, ignorant, and uncivilized. They are at first taught Turkish, afterwards the Arabic and French languages; next geography, history, arithmetic, and other elementary branches of education, including natural history. They have already a very tolerable museum of natural objects, well preserved and well arranged. A small botanic garden is also attached to the college. After undergoing a thorough elementary education, the pupils enter their medical course, comprising lectures on anatomy, physiology, chemistry, materia medica, practice of physic, surgery, and midwifery. The only room I did not see was the dissecting-room; it was closed at the time for want of subjects, which it is difficult to procure in a country where so much prejudice against dissection exists, and even against touching a dead body. I was shown into the grand examination room, fitted up with a great throne of state for the Sultan, who presides at the yearly examination of the candidates for the medical degree. There are also a dispensary and hospital attached to the college. The hospital is divided into medical and surgical wards, and a special ward is set apart for diseases of the eye. Dr. Spitzer delivers clinical lectures in the hospital, which he kindly invited me to attend.—*Constantinople*, March, 1848.—*Monthly Journ. Med. Sci.*

Medical Schools in Russia.—The medical schools of Russia are carried on in a grand and becoming manner, they are plentifully supplied in every respect. The studies must extend over five years, each year beginning in August and terminating in June. The whole of May is given up to examinations; all the courses last the full year, and every student is obliged to attend them, irrespectively of the peculiar branch of medical science he may wish to study. There are six *censures*, or examinations. If the candidate do not give satisfaction with the first three, he is put back for one year; but when he has creditably passed five, he obtains his doctor's degree. The sixth is only attempted by those who are looking for state appointments. The fourth and fifth years are especially dedicated to clinical instruction; after which the young men may settle in any part of the empire.—*London Lancet.*

On the Production of severe Internal Injuries without External Marks of Violence. By Dr. Casper.—Dr. Casper has communicated in his 'Wochenschrift' the results of the judicial post-mortems he has had occasion to make, and draws attention more than once to the vast amount of injury that may be done to important internal organs, unaccompanied with any mark of the external violence that has produced it; and justly remarks that such cases should teach practitioners great caution in the delivery of opinions from mere external inspection. Hencke only observes that rupture of the spleen *may* occur without any external sugillation; but Dr. Casper has met with ruptures and fractures of various other parts, as the kidneys, liver, heart, lungs, the ribs, vertebræ, and sternum. One truly extraordinary case of this kind he gives in some detail. A dealer in glass was descending a hill with his heavily-laden cart, on a cold winter's night, and in alighting the better to guide the horse, was thrown against a tree by the road side. On the external examination of the body nothing was seen but some slight abrasion of the skin over the zygomatic arch and the arm. Nothing particular was discovered within the cranium; but on opening the spinal canal, a large quantity of dark, fluid blood flowed out, and the spinous process of the first dorsal vertebra was found entirely broken off, lying among the soft parts. The spinal muscles in their whole course were much sugillated, but the medulla was entire. In the left side of the thorax there were about thirty ounces of a bloody fluid, and it was soon perceived that the *heart* was absent from its proper place, and it was found lying *loose* in the back part of the thoracic cavity, *entirely torn away from the large vessels*, the ends of these being plainly seen. The texture of the organ was firm, and its cavities contained dark coagula. The left lung at its middle fissure was almost entirely torn through. The right lobe of the liver was likewise ruptured.—*Brit. and For. Med. Chir. Rev., from Casper's Wochenschrift.*

Question of Professional Secresy.—Dr. VIRIELLE, of Rochelle, was consulted by M. B. for a venereal affection, which, without knowing it, he communicated to his wife. She separately consulted the same practitioner. Some time after the lady being desirous of procuring a separation from her husband, summoned Dr. Virielle as a witness, to testify to the injury she had received at his hands. Dr. Virielle refused to take the oath to speak the truth, as he could not reveal that which his professional obligations entitled him to keep secret; and he did not believe that even the authorization which the plaintiff offered him, as regarded her own case alone, would allow him to do so. The court decided that while the Code forbade professional revelations on the part of a physician made with an intention of doing injury, it did not authorize a refusal when demanded by justice; for this would be to exempt him from obligations which are imposed on all other citizens. The refusal is especially unjustifiable when the consultant herself demanded the revelation, and did not seek for any in respect to her husband.

A fine of sixty francs was imposed; but the medical society of Rochelle have carried the case, by appeal, to the court of Poitiers, where it seems that in 1828, in a precisely analagous case, judgment was given in favor of the medical attendant.—*L'Union Médicale.*

[Notwithstanding the approval which the editors of the French Medical Periodicals bestow upon the conduct of the physician in this case, we believe it quite unjustifiable. Inviolable, indeed, should be professional secrets in all the relations of private life; and no punishment could be too severe for him who, for mischievous purposes, betrayed those of which necessity, misfortune, or accident put him in possession. But, when summoned to the tribunals of his country, the furtherance of the ends of justice becomes the physician's highest duty; and if the inviolability here claimed were accorded, and fully carried out, especially in criminal cases, it might lead, not unfrequently, to the utter frustration of these ends.—*Med. Chir. Rev.*]

OBITUARY.

Died lately at Orthes, in the South of France, Dr. DUFOUR, in the 104th year of his age. He preserved his faculties to the last.

In London, on the 3d of December, in the 68th year of his age, SAMUEL COOPER, Esq., F. R. S., late Professor of Surgery in University College, and well known throughout the medical world by his numerous surgical writings.

TO READERS AND CORRESPONDENTS.

Justice to the editor and contributors of the Journal demands that he should state that a greater part of the pages of the last number passed through the press while he was laboring under a severe attack of typhus fever, thus preventing him from reading either the "*manuscript*" or "*proof sheets.*" This he hopes will be a sufficient apology for the errors and imperfections which that number contained.

The unusual length of the original department of this number has prevented several notices of books and introductory lectures intended for this from appearing until our next. In which, also, we hope to be able to complete the notice of the Transactions of the American Medical Association.

It affords us much pleasure to be able to announce to the readers of the Journal, that Prof. Pigné, late of Paris, now a resident of this country, has very politely acceded to our request to furnish a series of articles on several interesting points of pathology for its pages. These articles are written expressly for this journal—they have never before been published and are written in *French* for the only reason that their author is unacquainted with our language. Dr. Sayre has very kindly promised to furnish the translation as soon after the original is received as possible.

The Editor feels grateful to Dr. Clay, of Manchester, England, for the valuable pareel sent him, and will comply with his request as early as possible.

Correction.—The reader is requested to insert the following "out" at page 35, second line from top, which, by some unaccountable accident occurred in Dr. Sayre's "Extracts" in the last number.

"Therefore finding no other cause to which I could attribute this derangement of her nervous system, I was compelled to believe it caused by anxiety on account of her deformity, and advised the removal of her extra toes and finger, to which she readily assented."

We acknowledge the reception of the following books:—

An Illustrated System of Human Anatomy, Special, General and Microscopic. By Samuel George Morton, M. D., Penn. and Edinb., Member of the Medical Societies of Philadelphia, New-York, Boston, Edinburgh and Stockholm; Author of "Crania Americana," "Crania Ægyptiaca," etc. With three hundred and ninety-one engravings on wood. "*Oculis subjecta fidelibus.*" Philadelphia: Grigg, Elliot & Co., 1849, 8vo. Royal, pp. 642. (From the publishers.)

Manual of Physiology. By WILLIAM STENHOUSE KIRKES, M. D., assisted by JAMES PAGET, Lecturer on General Anatomy and Physiology, at St. Bartholomew's Hospital, with one hundred and eighteen illustrations on wood. Philadelphia: Lea & Blanchard, 1849, 12mo., pp. 552. (From the publishers.)

An Introduction to Practical Chemistry, including Analysis. By JOHN E. BOWMAN, Demonstrator of Chemistry in King's College, London. Philadelphia: Lea & Blanchard, 1849, 12mo., pp. 303. (From the publishers.)

Encyclopædia Obstetrica; or, a Theoretical, Practical, Historical, Biographical, and Critical Dictionary of Obstetrics, including Diseases of Women and Children. Each term is given in its English, Greek, Latin, German, and French form and acceptation; and to each article is appended a copious bibliography; the whole work presenting a full and faithful view of Obstetrics, through all the phases of their development and progress, to the present period. Illustrated with numerous wood engravings. By CHARLES CLAY, M. D., Licen. Roy. Coll. Phy., London, M. R. C. S, Hon. Mem. Institut d'Afrique, Paris. Author of Peritoneal Section for the Extirpation of Diseased Ovariæ. Author of various Obstetric Papers, and Editor of the "British Record of Obstetric Medicine and Surgery, etc. etc." London: H. Renshaw, Manchester: William Erwin, 1848. Parts 1 and 2, pp. 32-32. (From the author.)

Introductory Lecture delivered to the Class of the Starling Medical College, November 1st, 1848. By FREDERICK MERRICK, A. M., M. D., Professor of Chemistry and Botany. Columbus, 1848, 8vo., pp. 16. (From the author.)

Researches, Critical and Experimental on the Capillary Circulation. By BENNET DOWLER, M. D., Corresponding Member of the Academy of Natural Sciences of Philadelphia, etc (Reprinted from the New-Orleans Medical and Surgical Journal.) New-Orleans, 1849, pp. 34. (From the author.)

The Plea of Humanity in behalf of Medical Education; the Annual Address delivered before the New-York State Medical Society, and Members of the Legislature, at the Capitol, February 6th, 1849. By ALEXANDER H. STEVENS, M. D., President of the Society, of the American Medical Association, and of the College of Physicians and Surgeons of New-York, etc. etc. Published by the Society. Albany, 1849, 8vo., pp. 20. (From the author.)

On Etherization: A paper read before the Medical Society of Louisville, Dec. 18th, 1848, by LUNSFORD P. YANDELL, M. D., Professor of Chemistry and Pharmacy, in the University of Louisville. Published by the Society, Louisville, Ky., 1848. pp.36, (from the Society.)

Introductory Lecture to the course of Materia Medica, and Pharmacy, in the University of Pennsylvania. By GEORGE B. WOOD, M. D., Professor of Materia Medica and Pharmacy, and delivered Oct. 19th, 1848. Philadelphia, 1848, 8vo. pp. 23. (From the author.)

A Lecture, Introductory to a course on Obstetrics, and the diseases of Women and Children. Delivered November 5th, 1848. By GUNNING S. BEDFORD, M. D., Professor of Obstetrics and the Diseases of Women and Children, in the University of New-York.— New-York, 1848. 8vo. pp. 25. (From the Author.)

Introductory Lecture, delivered before the class of the Medical Department, of the St. Louis University. Session of 1848—1849. By JAMES BLAKE, M. D, Professor of Special, General and Surgical Anatomy. St Louis, 1848. 8vo. pp. 18. (From the Author.)

The Importance of Professional Studies. An introductiory Lecture delivered before the Students of Memphis Medical College, on the 13th of November, 1848. By GEORGE R. GRANT M. D. Professor of the Theory and Practice of Medicine. Memphis, 1848. 8vo. pp. 15. (From the Author.)

The following Journals have been received in Exchange:

The American Journal of Insanity, edited by the Officers of the New-York State Lunatic Asylum, for January. (Quarterly. Utica, N. Y.)

The American Journal of the Medical Sciences, edited by Isaac Hays, M. D., for January. (Quarterly. Philadelphia.)

The American Journal of Pharmacy, edited by Joseph Carson, M. D., and Wm. Proctor, M. D., Jr., for January, (Quarterly. Philadelphia.)

The New-Jersey Medical Reporter, and Transactions of the New-Jersey Medical Society, edited by Joseph Parrish, M. D., for January. (Quarterly. Burlington.)

The Medical Examiner and Record of Medical Science, edited by Francis G. Smith, M D., and David H. Tucker, M. D., for January and February. (Monthly. Philadelphia.)

The New-Orleans Medical and Surgical Journal, devoted to Medicine and the Collateral. Sciences, edited by J. Harrison, M. D., and A. Hester, M. D., for November. (Bi-Monthly. New-Orleans.)

Southern Medical and Surgical Journal, edited by Paul F. Eve, M. D , for January and February. (Monthly. Augusta.)

The Charleston Medical Journal and Review, edited by P. C. Gaillard, M. D., and H. W. De Saussure, M. D., for January. (Bi-Monthly. Charleston.)

St. Louis Medical and Surgical Journal, edited by M. L. Linton, M. D., John S. More, M. D., Wm. M. McPheeters, M. D., and Joseph N. McDowell, M. D., for January. (Bi-Monthly. St. Louis.)

The North-Western Medical and Surgical Journal, edited by W. B. Herrick, M. D., and J. Evans, M. D., January and February. (Bi-Monthly. Chicago and Indianapolis.)

The Western Journal of Medicine and Surgery, edited by D. Drake, M. D., L. P. Yandell, M. D., and F. W. Colescott, M. D. Not received since May last. (Monthly. Louisville.)

The Western Lancet and Hospital Reporter, edited by L. Lawson, M. D., and John P. Harrison, M. D., for January and February. (Monthly. Cincinnati)

The Ohio Medical and Surgical Journal. Edited by John Butterfield, M. D.—(Not received since September last.) (Bi-Monthly. Columbus.)

Buffalo Medical Journal, and Monthly Review of Medical and Surgical Science, edited by Austin Flint, M. D., for January and February. (Monthly. Buffalo.)

The Boston Medical and Surgical Journal, edited by J. C. V. Smith, M. D. Numbers for January and February received. (Weekly. Boston.)

The Annalist, a Record of Practical Medicine in the City of New-York, edited by N. S. Davis, M. D., for January and February. (Semi-Monthly. New-York.)

The Medical News and Library, edited by ——, for January and February. (Monthly Philadelphia.)

The New-York Dental Recorder, edited by C. C. Allen, M. D., Dentist, for January. and February. (Monthly. New-York.)

The British-American Journal of Medicine and Physical Science, edited by Archibald Hall, M. D., L. R. C. S. E., for January and February. (Monthly. Montreal.)

Monthly Journal and Retrospect of Medical Science, edited by ——. Not received since May last. (Monthly. Edinburgh and London.)

London Medical Gazette or Journal of Practical Medicine, edited by ——, for October and November. (Weekly. London.)

The British Record of Obstetric Medicine, Surgery and Diseases of Women and Children, &c. &c., edited by Charles Clay, M. D. (Vol. 1st, for 1848.)

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All remittances of money and letters on the *business* of the Journal, should be addressed to the publisher.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

Art. I.—*Address to the Graduates of the College of Physicians and Surgeons of New-York, at the Commencement held March* 12, 1846. By John B. Beck, M. D., Professor of Materia Medica and Medical Jurisprudence.

Gentlemen, Graduates,—The occasion on which we meet this evening, is one of deep interest. Having completed your various courses of study with credit to yourselves, and as your reward, having received the highest honors which it is in the power of this College to bestow, you are now about to leave us, and to become busy actors in the drama of human life. Although this is a period which has long been anticipated and wished for by you, the ties which bind you to us cannot be broken without emotion, and as you look forward, you find your bosoms swelling with mingled feelings of hope and fear. To those who have had the care of your instruction, it is no less an occasion of interest. They see issuing from these halls a large class of young men, associated in their minds with the most pleasing recollections of intelligence, industry and good conduct. Influenced as your minds and habits have necessarily been by their instructions and example, they cannot but feel a deep responsibility in your welfare, and their ardent prayer is, that your future career may be such as to do honor to yourselves and to this Institution. They hope to hear of you hereafter as successful and eminent physicians, and as honored men—elevating and improving the noble profession which you have chosen, and blessing society by your virtues.

Deputed by my colleagues to give you their parting counsel and advice, I feel oppressed with the crowd of ideas that flow in upon my mind. Like the anxious parent taking leave of his children, I feel as if I should like to touch upon every thing that relates to your future life. This, however, may not be, and fortunately is not necessary. In this institution you have been looked upon, not merely as the recipients of professional knowledge, but also as moral agents, destined to exert a wide influence, either for good or evil, on those around you, and your teachers have not left it to the few brief moments that remain to us, to endeavor to infuse into your minds such feelings and principles as they trust, under Providence, may conduct you through life with honor and safety; and if your uniform behavior during your pupilage can give any just ground of hope, they do not doubt that their most sanguine expectations will be realized. My duty, therefore, at present is comparatively limited, and I shall content myself with throwing out a few suggestions of a general nature, which I trust may be useful to you. And first, and above all, let me beseech of you, not to consider, because you have gone through the round of study prescribed by this Institution, nor yet because you have received the degree of Doctor in Medicine, that your education is now completed. If you do, notwithstanding all the time and labor you have expended, you had better at once abandon the profession and undertake some different occupation. Valuable as lectures are, they are, nevertheless, to be looked upon by the student simply as the preliminary means by which he may be enabled to perfect himself afterwards in a knowledge of his profession. They are merely the guides to show him how he is to pursue the never-ending course of self-instruction which he ought to propose to himself. The instruction of others never can make a man a physician. That he must make himself—and to do it requires a kind of study and training very different from that of listening to the prelections of the lecture-room. When you leave, therefore, this seat of learning, consider that you are merely changing the mode of your studies, and that you are now beginning a new and higher course of instruction. If you are deeply imbued with this feeling, every case that may present itself when you get into practice, will afford you ample scope for the exercise of all your faculties. The practice of medicine is not a mere matter of routine. The same disease occurring in different individuals is modified by a thousand different circumstances. The age, sex, habits of life, season of the year, climate, all exercise a controlling influence over its character, and accordingly demand a modification of the treatment. Every case, therefore, should be studied by itself, and should be made the subject of profound thought and investigation. If you pursue this course, you will find not merely that the practice of your profession is one that requires incessant study, but that it is one of surpassing interest.

With regard to the modes of conducting your studies, so as to yield you the greatest amount of profit, let me suggest to you, in the first place, to lay it down as an invariable rule, that when you undertake the study of a subject, to do it thoroughly; and in doing this, I do not mean that you should merely acquire a knowledge of all the facts connected with it, but that you should investigate as far as possible the general principles running through these facts. There is nothing so destructive of the tone and vigor of a man's intellect, or so detrimental to his advancement in knowledge, as to rest satisfied with vague and superficial notions. When he comes to turn his supposed knowledge to practical account, every thing will be hazy and misty before him, and his action will be uncertain and inefficient. Endeavor, then, to acquire the habit of hanging on to a subject until you obtain clear and precise ideas in relation to it. Once acquired, you will find it of incalculable value. The very process of acquiring it will invigorate your understandings, and instead of retarding, as might be supposed, will accelerate with tenfold rapidity your subsequent acquisitions. Recollect that all knowledge is more or less connected, and the thorough mastery of one subject, with its facts and principles, will really aid you more in your progress than a vague and shadowy acquaintance with the whole circle of the sciences.*

In the second place let me advise you now to begin a systematic course of reading in relation to your profession. In the course of his studies, and especially during his attendance upon the lectures, the student has little leisure for doing any thing more than to run over the ordinary text-books on the various branches to which his attention may be called. Useful as this class of books unquestionably is, there is another which is still more valuable. I mean those standard works on particular subjects, which embody the results of years of the thought and labor and experience of the ablest men, who have adorned our profession. In these, you will find subjects discussed in a very different way, from what they are in the popular text-books of the day. It is these, therefore, that you ought now to begin to read, and among others I would refer especially to the writings of Hippocrates, Boerhaave, Sydenham, Huxham, Sir John Pringle, Hillary, Moseley, Sir Gilbert Blane, Cleghorn, John Hunter, Rush, and the thousand valuable monographs with which our professional literature abounds. In alluding to Hippocrates, I would remark, that it is hardly to be expected that many of you will be able to peruse him in the original language in which he wrote. Of many of his more important works, however, you will find good translations, and these I would recommend to you. While on this subject, I cannot suffer this opportunity to pass without calling your attention to a work which is in progress, and which I trust will shortly make its appearance, and that is a condensed, yet full abstract of the writings of the father of Physic. This work is undertaken by our learned countryman, Prof. John Redman Coxe, of Philadelphia. Should the task be executed, as from the ability of the person engaged in it, I anticipate it will be, I know of no learned labor that will reflect more credit upon the author or upon the professional literature of his country, and at the same time confer a more lasting benefit upon his professional brethren. Should the work be patronized as it ought to be, it will furnish a good omen of the future progress of medicine in this country.†

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* It is related of one of the ornaments of the English bar, Sir Edward Sugden, that he attributed his great success in professional life, to the cultivation of this habit. Sir T. F. Buxton states, in his memoirs, that he once ventured to ask him what was the secret of his success. To which he replied, " I resolved, when beginning to read law, to make every thing I acquired perfectly my own, and never to go to a second thing till I had entirely accomplished the first. Many of my competitors read as much in a day as I read in a week; but at the end of twelve months my knowledge was as fresh as on the day it was acquired, while theirs had glided away from their recollection."

† Since the delivery of this address, the work of Prof. Coxe has made its appearance, under the title of " *The Writings of Hippocrates and Galen, Epitomized from the Original Latin Translations*," in an 8vo. volume of 681 pages, and comes up to all that was anticipated. I have only to unite with the venerable and learned author, in the wish expressed at the close of his work, "that it may awaken an interest in favor of our great predecessors, and eventually lead to a full and complete translation of their works."

In perusing the authors I have mentioned, do not, gentlemen, hurry over them. Make them the subject of meditation and criticism, and whenever you meet with a striking or important fact, or a new and ingenious train of reasoning, make a memorandum of them in a commonplace book, for the purpose of subsequent reflection and investigation. By steadily following up this plan, only for a short time, you will be astonished at the treasures of knowledge which you will accumulate; the new ideas which will start up in your minds, as well as the confidence which it will give to all your mental operations.

In the third place, let me recommend you to practise the art of writing. Every physician, whether he be ambitious of the honors of authorship or not, must now and then, at least, put his ideas upon paper for the purpose of being communicated to others. If he do this at all, he ought certainly to do it in such a way as not to disgrace either himself or the profession. Now, it is with writing as with every thing else. No man can do it well unless he make it a habit, and every student should, therefore, be in the daily practice of putting his thoughts upon paper. In a very short time this will impart an ease and facility which will render writing a pleasure rather than a labor. With regard to the style which you ought to cultivate, there are three things which I would more especially urge upon your notice as eminently essential. 1. *Perfect simplicity.* By this I mean the avoidance of pedantry, bombast, and all attempts at fine writing. These are inconsistent with the dignity of science, and are as opposed to a correct style as elegance and grace are congenial to it. 2. *Perfect intelligibility.* This is a cardinal feature in a good style, without which, in the present day at least, a book will not be read. The press is too prolific of books which can be easily understood, to expect the reader to stop and spell out his way to the meaning of an author. Some men, I am aware, plume themselves not a little upon the obscurity of their style, and flatter themselves that it is an evidence of their profundity. Do not, gentlemen, envy or emulate such profundity. You will generally find it slumbering away its existence in the dusky garret of the printing shop, or, perchance, making its way into daylight through the kind offices of the trunk-maker. 3. *Perfect integrity.* By this I mean a true style, in other words, that a style should be such as not to convey a double, or an exaggerated or a lessened idea—but that it should convey "the truth, the whole truth, and nothing but the truth." The importance of this feature in the style of a medical writer, must be self-evident. An erroneous idea conveyed in a medical work, either from design or inattention, may prove the source of incalculable mischief. I am the more desirous of calling your attention to this point, because the violations of it are, I fear, too frequent. Men even of upright intentions and with an honest desire after truth, not unfrequently give such a coloring to their statements as convey impressions very wide of what was, perhaps, intended, and certainly very wide of the truth. Let precision of thought and precision of language, then, characterize every thing that you write, and let the whole be conveyed in a style simple and intelligible.

In what I have thus far suggested to you, gentlemen, I have looked upon you merely as students of your profession, and I trust no period of your lives will ever arrive when you shall divest yourselves of that character.

But you are also to be *practitioners of medicine*, and as such your ambition of course ought to be to render yourselves distinguished and useful. To enable you to become so, permit me to make one or two suggestions.

In the first place, cultivate the faculty of *observation.* By many, it is supposed, that this is the exclusive gift of nature and not improvable by art. Differing as men do undoubtedly in their powers in this respect, there still can be no question, that much may be done to improve them, by appropriate discipline and cultivation. To dwell upon the particular means by which this is to be accomplished would occupy too much time on the present occasion. I cannot, however, refrain from suggesting, that it is not to be done as a matter of course, merely by the multiplicity of the subjects for observation which may be presented to you. This is, indeed, the common opinion, and the public suffrage is accordingly too apt to be given in favor of those whose opportunities are the most extensive. The physician, therefore, who sees the greatest number of patients, is generally supposed to have observed the most, and to be the most experienced. Nevertheless, this is frequently a great error, proved by every day's experience. To have the opportunity of observing, is one thing; to observe, is another; and the observation of one case, correctly and thoroughly made, yields a richer harvest of knowledge and experience than do years of ordinary practice by an unobserving practitioner; and the history of one disease, or of the effects of a single remedy, given by the hand of a master, confers more lasting and real benefit upon the science and the world than ages of the experience of ordinary men. In fact, there is such a thing as seeing too much; and the rapidity and even hurry consequent on the attendance upon a great number of cases, is utterly fatal to that close and detailed investigation, without which observation is of no sort of value. Instead of following nature and exploring the peculiarities characterizing individual cases, every thing is viewed in the wholesale way, and remedies are prescribed accordingly. Now, it is very evident that such practice, however extensive, can never make an enlightened physician. In fact, the more he sees in this way, the less likely is he to become so. It is an interesting fact that Hippocrates practised only in small towns, not one of which, it is affirmed, was of itself able to support a physician. It is not, therefore, the mere amount of cases, or the extent of his opportunities; it is the capacity of observing and the power of extracting from each case every thing that is valuable, that forms the great physician. To the young practitioner just commencing his career, I do not know anything so truly encouraging, as the consideration of this very circumstance. During the first few years of his professional life, instead of repining at his want of business, he should recollect that this is a wise allotment, intended for his ultimate benefit. If he rightly improve the leisure he then enjoys, he has it in his power to make himself all that his highest ambition can crave.

But, gentlemen, you will find the observation of facts of comparatively little value, unless you possess the power of *reasoning* correctly upon them, and the culture of this faculty should be another object of your ambition. When I speak of the power of reasoning, I do not mean the ability to speculate or frame theories, but I mean the power which shall enable a man to compare individual facts, and draw from them just and legitimate conclusions. Important as observation is, it is chiefly so as forming the basis of reasoning; and its being so, is the main reason why accurate observation is so invaluable. The necessity and importance of cultivating this faculty by the young practitioner, is self-evident. The whole of practical medicine is, or ought to be, an exercise of this faculty, and other things being equal, just in proportion as a physician is gifted with this talent will he become preëminent. As I have already stated, the practice of medicine is not a mere matter of routine. No two cases are exactly alike, and the same disease occurring in different individuals, presents itself under different forms and modifications, and in the just appreciation of these differences and modifications, and in the nice adaptation and adjustment of remedies to them, a constant exercise of the reasoning powers is called for. It is not, however, in ordinary practice that the necessity of the reasoning faculty appears most striking. To the enlightened physician, questions of grave import are continually presenting themselves, upon which he is required to give an opinion, and which, to be of any sort of value, must be the result of more or less elaborate trains of thought and reasoning. Questions in medical jurisprudence, for example, are only to be determined in this way. In cases of this kind, mere science, however profound, mere learning, however extensive, are not sufficient. It requires the exercise and application of a severe logic to arrive at just conclusions. By the absence of this, amid all the parade of learning, juries have been misled; life and character have been jeopardized; justice has been evaded, and the professional witness disgraced. Questions relating to the spread of epidemic diseases furnish another example. Whether yellow fever, for instance, is a contagious or a non-contagious disease; whether it is imported from other parts of the globe, or is of domestic origin, are problems of great interest, especially in all our commercial seaports, and have for a great length of time continued to agitate and distract the public mind. These every medical man who lays the least claim to intelligence ought to have investigated, and should have come to some decision in relation to them. And yet how can he do so intelligently and satisfactorily, unless he has cultivated the power of reasoning, or in other words, the power of comparing the general mass of facts which the subject presents and of drawing legitimate inductions from them. Had this power been possessed, even in a moderate degree, by many of those who have talked the most loudly and written the most boastingly on this subject, how much empty assertion, how much bloated dogmatism, how much noisy absurdity would not the world have been spared. Had their minds been better disciplined, instead of appealing to the fears and prejudices of the public, always alive on such subjects, they would have rested it on the sure ground of fact and judgment. Instead of attempting to decide it by names and authority, it would have been subjected to the test of reason alone.

There is only one other incentive which I shall offer to show the necessity of cultivating the power of close and accurate reasoning, and this is the incessant tendency which there seems to be in our profession to indulge in theories and hypotheses. From the remotest periods down to the present day, this has been the current vice of physicians. Why this has been the case, is a subject of interesting inquiry, and would lead to many important views of our science. This, however, is foreign from my present purpose. If these theories had been confined to subjects of abstract speculation alone, their consequences would have been as harmless as their textures were frail. Unfortunately, however, they have formed the basis of modes of practice, under the operation of which hundreds and thousands of human beings have been hurried into premature graves. Now, how is any correct judgment to be formed concerning the respective merits of these theories and practices except by an observing, thinking and reasoning mind, which shall be able to analyze the principles upon which they are founded as well as to detect the fallacies by which they are supported.

Again, gentlemen, if you hope to succeed as good practitioners, cultivate a *generous love of your profession.* By this I do not mean that love of an occupation which yields a man great pecuniary rewards, nor yet that love of it which arises simply from habit or long-accustomed use. To inspire either of these requires neither learning, nor talent, nor generous feeling. I mean something nobler than this. I mean that love of your profession which shall induce you to devote all your faculties to the cultivation of it, and which shall inspire you with the lofty ambition of signalizing yourselves in it, by improving the science and benefitting mankind. Now the only way to do this, is to consider your profession as a *learned one.* Without learning, no just conception can be formed even of the *nature* of medicine as a *science,* while the connection between principles and the application of them can never be appreciated. Hence, without this, it must be practised as a mere art or trade, and the interest taken in it can be nothing more than that taken in any ordinary occupation or labor. More than this, in the practice of medicine there are so many things positively disgusting ; there is so much of actual suffering to be witnessed ; so much of frailty and vice to become privy to ; so much of caprice and even insult to be encountered ; and, besides this, so many humiliating offices to be submitted to, that were this all, no man of generous mind would be found in the ranks of the profession. Viewed, however, with the eye of philosophy, and with the cultivation which learning engenders, all these disadvantages are as nothing. It is found to be a noble science, involving subjects of the highest interest, and the most momentous import. Every practical detail is found associated with some interesting fact in relation to the animal economy, or with some important principle in the management of disease. The humblest offices rise into consequence, and everything is teeming with interest and instruction. Every fact, however trivial or apparently unimportant, calls into exercise the power of observation, and in its wide spread relations to other facts, supplies incessant materials for all the powers of thought and reason. Thus it is that the glow of enthusiasm is enkindled, without which genius is cold and science barren. In this way it is, that learning creates a love of the profession, which can be acquired in no other way ; and in no profession is such enthusiasm so essential, as that of medicine. A science, boundless in its extent ; and in many respects most abstruse in its nature ; built upon long-continued and repeated observation ; requiring aids and helps frequently most difficult of attainment ; *nothing* can be accomplished without zeal and devotion, and *with these,* it is truly astonishing what may be done. Inspired with these, even ordinary intellects have performed prodigies and left behind them imperishable monuments of labor. To the young practitioner of medicine it is hardly necessary to say, how absolutely essential it is that he should cultivate such a love of his profession. If in the uncorrupted period of his existence he do not acquire it, it is in vain to hope for its attainment in after life. As he advances in years, other feelings and passions gain the ascendancy, and he will find, perhaps before he is aware of it, that he is pursuing his profession with no higher motive than that of gaining consequence in society, or, of amassing a fortune. From such a man, science has nothing to hope, and he gives to the world and to his profession nothing but the influence of a barren and bad example.

But, gentlemen, I must bring these desultory observations to a close. Before I do so, however, let me urge upon you, amid all your acquisitions—amid all the honors and success, which I trust may flow in profusion upon you, to *cultivate a spirit of humility and modesty.* Recollect that this is the gem, which shines the brightest in the crown of the greatest men that ever adorned our nature. Look at Newton! Although by his wonderful intellect he towered so immeasurably above the rest of mankind, yet his unaffected modesty raised him still higher in the scale of excellence. And what think you was the reason? Why, his eagle glance had pried into so many of the mysteries of nature; he had ascended Pisgah, and had seen so many of the wonders of creative power before him, that he was humbled with the consciousness of his own weakness and ignorance, and bowed with a lowly spirit before the great and incomprehensible Creator of all things.* And so it ought to be, and will be with every right-minded man. The farther he advances in the path of knowledge, the less will he think of his acquisitions, and the more deeply will he feel how narrow and feeble his powers are, and how little, very little, even of the sciences well understood, he can hope to compass. I am the more anxious, gentlemen, to urge upon you the cultivation of such a spirit as this, because I am convinced it is the offspring, as well as the ornament, of true knowledge. If you possess this spirit, you will not arrogantly set yourselves up to decide upon questions beyond your comprehension. Above all, you will never suffer the pretensions of science to sit in judgment upon the Almighty. With regard to the Bible you will reason thus—Here is a book which professes to be written under the inspiration of Heaven. If it be so, (and of this the evidence is overwhelming,) every word of it must be true; it cannot be otherwise—and you will give to it your entire and unqualified belief. And you will not permit any apparent discrepancies between it and the pretended discoveries of modern science, to shake your belief. In the spirit of true philosophy, as well as of true religion, you will confess that science is still in its infancy; that man's powers are at best feeble and limited, and that it would be profanity, as well as folly, to set up these against what you believe to come directly from the Almighty. Under the influence of such a spirit as this, too, gentlemen, I conceive you will best be enabled to perform all your relative duties. To your professional brethren, you will extend all the offices of courtesy and good feeling. To your patients, you will devote all your best energies. You will look upon them not merely as the subjects of scientific and professional interest, but you will sympathize with them as partakers of the same common nature, and destined to the same end as yourselves. While to the public, you will set a bright example of blended science and virtue.

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* A short time before his death, it is stated that he uttered this memorable sentiment:—"I do not know what I may appear to the world; but to myself I seem to have been only like a boy playing on the sea-shore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, while the great ocean of truth lay all undiscovered before me."—*The Life of Sir Isaac Newton.* By David Brewster, LL. D., F. R. S., p. 301.

Of Socrates, it is said, that he declared that he knew no reason why the oracle of Delphos pronounced him the wisest of men, except it was that, being conscious of his ignorance, he was willing to confess that he knew nothing.

Before I close, let me throw out one word of encouragement, in relation to your future prospects. There is nothing so common for young men just entering upon life, and especially those of enthusiastic minds, as to call up to their fancies, the numerous difficulties and discouragements which are to obstruct their career. They look around them and see the whole world in action. Every post of honor and of emolument is already occupied. Every avenue to fame and fortune is already crowded with aspiring candidates. They turn with disgust from the scene—they despond, and they begin to imagine that success is impossible. Now, all this is founded on mistaken and imperfect views of human life. A few brief years will level all these distinctions. As you advance, you will find all the busy actors who now so greatly fill your imaginations and excite your fears, sinking, one by one, and leaving vacant more than enough to gratify your largest ambition. Let not, then, these considerations discourage you. Before you are aware of it, opportunities of distinction will present themselves, and the only question then will be, are you prepared to seize the proffered honor. The early part of your lives is the one, as a general rule, the best fitted for study and exertion, and if you loiter away that precious period in idle and vain forebodings, or what is worse, squander it in indolence or dissipation, you will find honor after honor eluding your feeble grasp—fortune will spurn you, and place the crown on other and worthier brows. Begin life, then, with a manly courage. Cast behind you that cold-blooded philosophy which would teach you that you are not to expect success. Recollect that it is a law of the Almighty himself, verified by the whole experience of mankind, that honest endeavor, with an humble reliance on Providence, will sooner or later meet with its reward, and you need not fear that you will be made exceptions to the general rule. It only remains for me now to bid you an affectionate farewell.

Art. II.—*Cases of Erysipelas, which occurred at Soluca, Mexico.* By Israel Moses, M. D., U. S. A.

In these observations I propose to give an account of some cases of erysipelas which occurred in the city of Soluca, Mexico: and as the locality and circumstances under which diseases arise are both interesting and instructive, I have preceded my cases by a brief account of the place where they occurred. About the 8th of January, 1847, the 6th and 8th Infantry and 4th Artillery, under General Cadwallader marched from the city of Mexico. The sick were left behind, so that we set out with a clean bill of health. Soluca, the capital of the state of Mexico, forty miles from the city of Mexico, is situated in the midst of a most beautiful and fertile valley, environed by hills. To the S. W. of the town is the Nevada de Soluca, a mountain 2000 feet above the valley terminating in five snow-capped peaks which enclose a lake, upon the banks of which is a monastery. The centre of the valley is occupied by Lake Lerma into which numerous streams flow from the mountains, abundantly supplying the villages and towns with the clearest and most delicious water. Corn, wheat and barley are the principal products. Soluca contains about ten thousand inhabitants, and is well built in the form of a square. The streets which run parallel in both directions are kept in an admirable condition of cleanliness, by a system of drainage, which might be advantageously adopted in our large cities. The cleaning of the streets is done by prisoners. The temparature is much lower and less equable than in other parts which I visited. Gusts of wind, generally coming from the N. W., were frequent; often followed by heavy falls of rain, loud thunder and vivid lightning. On the 6th of March, a violent hail-storm occurred, which lasted about an hour. In fine weather the thermometer usually stood at 60° to 65° from 9 A. M. until 6 P. M.; during the remainder of the day varying from 48° to 52° F. Sudden and great changes were frequent, the thermometer sometimes falling 10° or 12°. The inhabitants usually enjoy good health. Diseases of the nervous system prevail extensively in the various forms of paralysis, chorea and arrest of development in different parts of the body. Affections of the eye causing blindness are frequent. Smallpox has prevailed extensively amongst the Indians inhabiting the valley. About four-fifths of those who come to the city on market-days, are deeply pock-marked. Vaccination is rarely or never practised, as far as I could ascertain, even among the educated. A fact worthy of note in the medical history of this place is, that during the cholera season, 1833, not a single case occurred at Soluca, while it prevailed extensively in the town of Lerma, fifteen miles distant. The elevated position of the town rendered it very salubrious; though we all suffered more or less for a short time after our arrival, from difficult or embarrassed respiration: indeed, one officer who was inclined to phthisis was compelled to leave, in consequence of the aggravation of his cough and pain in the chest. As was to be expected, diseases of an inflammatory character prevailed, especially pneumonia, bronchitis and rheumatisms, as there were no fire-places in the houses which our troops occupied, they were more or less cold and damp, especially in wet weather; the floors are of brick and the rooms contained no fire-places. This was the only appreciable cause for the cases of erysipelas which were very numerous in all the regiments. It was remarkable that this disease, in nearly all the cases, commenced and was confined to the face and head. Slight cuts or scratches frequently gave rise to erysipelatous inflammation. As the inhabitants did not suffer, we naturally supposed that it may have been the effect of this elevated temparature or the *dampness* of the barracks, upon our soldiers who had been some months in the warm and equable temperature of the city of Mexico or the lower country. During two months that the 6th Infantry (to which regiment I was attached) occupied this town, nine cases of erysipelas occurred of a severe character, in nearly all of which the disease commenced or was confined to the head and face. A short outline of the cases may not be uninteresting.

Case 1.—The first case, Private Hoffman, occurred a fews days after our arrival. He was attacked with uneasy, chilly sensations and general *malaise* in the evening and presented himself next morning, complaining of pain and sense of enlargement of the head. Tongue heavily coated; loss of appetite; fever, etc. The face was swelled generally and spots of redness were visible about the forehead, between the eyes and brows. He was ordered an emetico-cathartic and light diet; the next day the redness and swelling had increased, so that the forehead and nose were affected. I painted the part with a strong solution of nitrate of silver and gave him good diet of soup. As the disease increased I painted the parts with the caustic solution, until the extension of it was checked, which was on the fourth day, when it covered the whole face; from which time he recovered.

Case 2.—A few days after, Private Ryan was attacked in the same manner but with greater severity, the disease rapidly spreading so as to involve the face, scalp, ears and neck, completely distorting his features, and giving his head nearly twice its natural size: active febrile symptoms, with delirium set in. Tongue heavily coated, dry and brown in centre. Pulse 100, full and strong. Ordered calomel, gr. x., ipecac. gr. xxx., which vomited and purged him moderately. Painted the face with the solution of caustic and applied cloths dipped in a warm lotion of acet. plumbi and opium, which greatly relieved the intense burning. The hair was cut short; on the third, next day, he began to take quinine, gr. x., three times a day with wine and beef soup. On the eighth day, numerous abscesses formed beneath the scalp, and the disease had been checked. At the same time a hard and painful tumor began to form over the mastoid process on the left side which after being poulticed for a few days was opened and more than an ounce of pus evacuated. About the twelfth day the patient may have been considered recovering, though the convalescence was tedious. The same treatment and diet was continued throughout the period of illness.

Case 3.—January 15th, Private Stewart was brought to the hospital with swelling of the right leg and foot, attended with burning and itching pain, redness, etc. The limb as far as the knee was tense, shining, painful on pressure and pitting. The constitutional symptoms were slight. The caustic lotion was freely applied, which evidently cut short the disease on the third day. But as it receded from the lower extremity it attacked the face from the edge of the scalp to the upper lip where it was checked by the same means. Quinine, gr. x., three times a day were given from the commencement with good diet. The disease on the face was much more acute than on the leg and attended with active febrile symptoms, furred tongue, loss of appetite, but no delirium.

Case 4.—On the 21st January, Private Agnew presented himself with redness, swelling and pain of a burning character about the right ear, which had been ushered in the previous evening, with chill followed by uneasy pains in the head and back. The disease was well marked. I directed the affected part to be painted with nit. silver solution, and emitico-cathartics to be taken, and plain but good diet. On the next day after the prima viæ had been cleared, I ordered quin. gr. x., q. 4 h. The erysipelas extended so as to involve the whole side of the face. The solution was freely applied, but did not seem to produce any appreciable effect until the third day, when the disease no longer spread and convalescence was established. In this case there was no delirium.

Case 5.—February 6th. Private Dunn was brought to me from the guard-house, where he had been confined for drunkenness, with his face very much swollen and of a dark red color, shining and œdematous; not having slept for two nights and suffering from the apparitions of mania potu: had eaten nothing for the last twenty-four hours. There was tremor of all his limbs and tongue which was thickly coated with a yellow slimy fur and disposed to be dry. Pulse strong, 100. He was ordered cal. gr. xv., to be followed by ol. ric. The face to be painted with caustic, and cloths saturated with a lotion of acet. plumbi and opium to be laid over. The next day, all his symptoms were aggravated, the erysipelas was spreading over the scalp and down the neck, he had been delirious all night; his tongue was now dry and brown; sordes accumulating on his lips and teeth; constant tremor and subsultus; comatose, unable to answer questions: skin hot and dry: pulse 120, feeble and quick. As he was rapidly passing into a low typhoid condition, stimulants were freely administered in the form of hot brandy toddy in which quinine was dissolved: carb. ammonia 10 grains every two hours and beef soup. The sol. nit. silver was reäpplied to the whole surface inflamed, and covered with the wet cloths. During four or five days, the man continued in a dangerous condition. The head and face were frightfully enlarged and features distorted; breathing and deglutition were performed with the greatest effort: the coma was deep and constant; tongue dry and hard as a board. The stimulating plan was firmly and steadily pushed. The quinine was increased to twenty grains every two hours, with carb. ammonia, brandy and beef-soup. The first symptoms of improvement were evinced on the morning of the eighth day, following the application of blisters inside the thighs, when he appeared to be slightly conscious and asked for some drink which he swallowed eagerly though with effort. From this time he continued to improve slowly under the continued use of stimulants and tonics. His face was really a disgusting sight to look upon, being one continued hard black crust, resembling that of a person who was recovering from an attack of confluent small-pox; without a distinct feature or the least expression; the eyelids not capable of being separated. The convalescence was tedious and he was unable to return to duty until May. This was a most interesting and instructive case to me and I watched the issue with anxiety, scarcely believing that he could recover by any human aid, yet I was most agreeably disappointed. Indeed, I have within my short experience seen so many cases apparently hopeless, recover by careful watching and the judicious application of remedies, that I hesitate in ever expressing an unfavorable opinion as to the result, and invariably quote the old but trite maxim, "While there is life, there is hope."

Case 6.—February 15th. Private Mott was attacked with chill, followed by fever and burning pain in the head and eyes. When he came to the hospital the forehead and eyelids were of a bright red hue, swollen and painful to the touch: tongue coated, moist; pulse 100, of good strength. Moderate heat of skin. As his bowels had not been emptied for two days, he was directed to take an emetico-cathartic, which operated well, after which he took quinine, gr. x., every four hours: the affected parts were painted with the usual application. During the next two days the disease spread over the entire face and ears, which were swollen, tense, red and very painful; as the redness extended the caustic solution was applied so as to cover the whole diseased part and a margin of healthy surface beyond the line of demarcation, and we were pleased to notice that on the fourth day from the attack the redness no longer extended. The swelling began to subside and in a few days desquamation set in. During all this time he continued to take sixty grains of quinine in the twenty-four hours, with beef-soup once a day for dinner. In this case there was no delirium nor any typhoid symptoms, the attack being of a sthenic character and occurring in a man of robust health.

Case 7.—Private Lovett was attacked in the same manner as the above case, the disease first appearing in the right ear and extending to the face and eyes; the same treatment in all respects was pursued, and with the same good results: he returned to duty on the tenth day from the attack.

Case 8.—Private Cuppinger was brought to the hospital, March 4th, having received a sabre cut over the head, about three inches in length and down to the cranium. As the wound was slight it was simply dressed with adhesive plaster, the hair being shaved off for a short distance around. The next day, about noon, he complained of feeling chilly, which was followed by some febrile excitement, thirst, anorexia and pain in the wound. On removing the dressing, the cut was gaping, the edges swollen, red and œdematous, and this appearance extending for some distance over the scalp. The head was shaved and the edges of the erysipelatous blush painted over with the nit. silver solution, quinine, gr. x. q. 4 h., ordered with soup diet. The disease extended in front only, and as far as the eye-brows where it was checked. The patient recovered in ten or twelve days.

Case 9.—February 25th, was sent for to visit Lieutenant ——, in consequence of a renewal of hemorrhage from a chancre on the penis. This officer, while in Puebla last August, contracted syphilis, which destroyed the prepuce and nearly one half the glans penis. Soon after the entrance of our army into the capital and having been on duty during the engagements, without taking proper care of himself, he was attacked with violent hemorrhage from the ulcers, which at one time rendered his recovery doubtful. Previous to my being sent for, however, he had entirely recovered his health, and the chancres no longer required other than simple dressings. On the 24th, we rode out together some three miles to see a division drill and the same night he indulged in a debauch. Though generally regular in his habits, he had for a few days been living rather freely. On visiting him, I learned that he had lost about two ounces of blood and found it still flowing from a point of the chancre not yet healed. I applied a styptic with lint and bound the part tightly. I noticed at the same time a general tremor of his hands and tongue and a peculiar expression of anxious fear on his countenance. Since he had retired he had been restless and unable to sleep. Perfect rest in bed and a pill containing two grains each of opium and camphor were prescribed.

26th. Restless and dreaming all yesterday, no appetite, no sleep, increasing tremor of tongue. At bed-time I gave him two ounces of brandy, and eighty drops tr. op. combined with camphor water. About 11 o'clock he became very wild and delirious; could not be kept in bed, but was constantly wandering about and seeing imaginary objects. At 6 o'clock this morning I found him up, dressed and in the act of shaving, which he left half unfinished, and upon asking him why he did not wait until later, said "he was obliged to make a report of the battle which had been fought last night." He was persuaded to go to bed, however. Tongue was moist, and coated yellow. Pulse 120, quick. As there was a great deal of nervous exhaustion and tremor, the following was ordered: ℞. tr. op. ʒss., carb. ammonia, gr. xi., aq. camphoræ et brandy āā. ℥ij, a tablespoonful every two hours, porter and chicken-soup; penis was dressed; no hemorrhage.

27th. Has not slept in spite of the large amount of anodyne which he has taken, but has been all night in a most fearfully-excited state, constantly talking and commanding as if in battle. In addition to what was prescribed in the morning he took a drachm of laudanum every hour from 8 o'clock until midnight, without producing the slightest quietude until 6 this morning, when he seemed disposed to sleep, and I left him to attend to my morning duties. At 7 o'clock he was quiet and breathing heavily as if in deep sleep. At 8 I was sent for and told he was dying; he was comatose, unable to be aroused, pupils very much contracted and insensible, pulse 144, very quick and small, lips and nails blue, in fact almost moribund; large sinapisms were applied to the legs and abdomen; cups to the temples and along the spine; enemata of brandy with 30 grains of quinine given, and as much brandy with carb. ammon. by the mouth as he could be made to swallow; as these remedies seemed to produce no effect, I had his spine rubbed with croton oil. After steady application of these means for two hours and a half his skin began to grow warm; he opened his eyes and put his hand on his thigh, as if to remove the mustard.

March 1st. He has slowly improved since last date, and slept a great deal. This morning an erysipelatous redness appeared on the left leg, where the mustard had been applied, also on the left natis, both of which were painted with the nit. argent. sol. Quinine, wine and porter, with chicken-soup have been continued.

2d. Erysipelas has spread over the foot and ankle, which are swollen, painful, tense and shining; that on the natis has extended to the groin and it has appeared on the forehead and temples.

3d. Rather restless and uneasy last night, disposed to wander in mind;

this morning rational; ate a piece of beef-steak and drank some coffee. Erysipelas still extending, particularly on the face.

4th. Passed a comfortable night and is decidedly better this morning; complains of deafness, the result of the large doses of quinine which he had taken; erysipelas on the face is fading; the whole left lower extremity from the hip to the toe is involved; continued sol. nit. argent. to leg. Quinine, gr. viij. q. 4 h., chicken-soup and brandy-toddy, anodynes at night.

6th. Mind feeble and disposed to indulge in fancies; general symptoms improved, erysipelas on the face has subsided, the leg and foot are in the same condition, but more œdematous and numerous vesicles cover the calf and ankle, which were yesterday enveloped in a flaxseed poultice, giving great relief to the burning heat. Continue treatment.

10th. Foot and leg are much better, a spot about the size of a dollar on the dorsum of the foot has sloughed. Bread and beer poultices have been applied with a continuance of the same course of medicines and diet. He is so much improved, that I determined to carry him to the city of Mexico in an ambulance, as we were ordered to march on the next day. He bore his removal well, and slowly recovered, though for a long time he was fully persuaded that his illusions were real. During his convalescence the ulcers on the penis entirely healed, but numerous small abscesses formed beneath and on the eyelids, hips, elbows, scalp and elsewhere. He is now fully recovered, except slight lameness.

I have related the history of this case as briefly as I could, endeavoring to bring out only the most important events from the very copious notes which I took at the time, but I could not refrain from entering somewhat more fully into the details of a case which proved so interesting and instructive to me, and hope it may be somewhat so to others. The obstinacy with which the nervous system, under some diseases, will resist the sedative effect of opium is well exemplified, as well as the energetic means which we are obliged to employ, when at last the nervous energy becomes exhausted and vitality is scarcely to be preserved.

As all these cases occurred in men of robust constitutions and enjoying good health, the treatment pursued will approach more nearly a *standard*, than that pursued when it occurs among the poor in large cities or in public charities, while we may attribute the disease more precisely to a single cause, which is universally acknowledged to be productive of the disease, viz. a residence in cold and damp buildings or exposure to cold and wet.

In Cases 5 and 9, intemperance no doubt brought the system into a condition more prone to the malady, and hence aggravated the severity of the symptoms. In what particular way causes act to produce this disease, we are unable to explain, but it is a well-ascertained fact that whatever tends to impoverish the blood and depress the vital forces will induce it, hence we have it arising spontaneously in the crowded wards of civil and military hospitals, in prisons, on ship-board, in low, damp situations and among those suffering from depressing affections of the mind.

Being aware of these facts, it seems strange that some practitioners have been led so far away by preconceived ideas of its strictly *inflam-*

matory nature, as to recommend that blood-letting and antiphlogistic remedies should be vigorously employed, in order to *cut short* the disease, the possibility of which many, and among them Dr. Watson, seem to discredit. The weight of the prevailing opinion at the present time, is in favor of the stimulating and supporting plan of treatment, and the avoidance of blood-letting; and of this I would wish to be considered an humble advocate. Among its supporters are Drs. Fordyce, Wells, Heberden, Elliotson, and Williams, all of whom have possessed the most extensive opportunities of witnessing its beneficial effects. At the onset of the disease, where the symptoms are apparently highly inflammatory, with active delirium, we are strongly inclined to suspect cerebral complication, and use the lancet; but meningitis and cerebritis are, I believe, rare complications, and blood-letting seldom or never called for. During the last three years I have probably attended forty cases, in not one of which has the lancet been indicated. On the contrary, a steady perseverance in the stimulating and tonic course, has met with the most flattering success in my own practice and that of all our army surgeons with whom I have conversed. The use of a strong solution of nitrate of silver, (a scruple to the drachm,) and which has lately been strongly advocated in the Journals, at home and abroad, has been applied with the most decided effect of controlling the disease, while the lotion of acet. plumbi et opium, either cold or warm as was most conducive to the comfort of the patient, has tended to relieve the painful sensation, "as if the part were on fire," as many expressed themselves.

As will be seen from the history of the above cases, quinine was used in all except the first, from at an early period of the disease, and continued throughout, the dose varying according to the degree of severity of the symptoms. Of the stimulating and tonic effects of this remedy, in all diseases marked by depression of the nervous forces or impoverished sanguification, I am well convinced. Its astonishing power in the cure of that form of congestive fever which occurs in the southwest, I had an opportunity of witnessing during the summer, at Jefferson Barracks, Mo.

Art. III.—*Cases of Inguinal Aneurism, with Remarks.* By W. H. Van Buren, M. D., Surgeon to the Bellevue Hospital.

I. *True Inguinal Aneurism; attempt at manual compression of the external iliac artery; subsequent ligature of the artery; cure.*—Mr. S. B. H., of Tarrytown, N. Y., 25 years of age, and of robust constitution, came to the city, and placed himself under my care, in July, 1848, with an aneurism in the right groin, about the size of an orange.

In the month of March, 1848, Mr. H., whose health had previously been excellent and uniform, was accidentally jammed between the wheel of a carriage and a gate-post—the wheel striking the buttock, and forcing the groin against the post; to save himself from being crushed as the carriage passed, he pushed backwards with all his strength—so much so as to lift the wheel, and force the carriage to some distance from the post. He was much bruised by the accident, and limped for a fortnight afterwards, at the end of which time he, one night in bed, accidentally discovered a pulsating swelling in the groin, about the size of a hazel-nut.

From this period, until he came under my notice, the tumor had steadily increased, and during the three weeks previous, it had almost doubled its size. It was situated immediately below Poupart's ligament, and presented a lobulated appearance; its contents were entirely fluid. Pressure upon the external iliac artery arrested the pulsations of the tumor, and caused it to collapse. The aneurismal thrill was trifling. The patient was otherwise in perfect health.

On being informed of the nature of his disease, and its only certain remedy, Mr. H. expressed his entire willingness to submit to the necessary operation.

During my examination of the tumor, I was struck by the ease with which its pulsation was controlled by accurate pressure of the trunk of the external iliac artery against the pubes; the force of one finger seemed almost sufficient to command it. This circumstance, with the recollection of the success recently attained by Prof. Knight, of New-Haven, in the treatment of a case of popliteal aneurism, by continual manual pressure applied by relays of assistants to the trunk of the femoral artery, induced me to think seriously of the feasibility of employing similar means in the present instance. Pressure by means of an instrument I was satisfied could not be borne, but the apparent practicability of this novel mode of applying it, with the remotest possibility of its success, led me to conclude that I should not be doing justice to my patient were I to neglect the chance, and I accordingly determined, whilst he was becoming accustomed to his new quarters, to give it a trial.

Having obtained the assistance of a sufficient number of my friends—whose devotion to their object certainly deserved better success—we commenced pressure with the fingers upon the artery about an inch above the crural arch, on the 1st of August, at 12 o'clock, M., having previously evacuated the bowels, and placed the patient upon a hard mattress, under the influence of digitalis, by which the pulsations of the heart were reduced to 45 per minute. It was thought better that cold should not be applied to the tumor. During the first eight or ten hours the pressure was accurately kept up, and borne without complaint; some pain and restlessness then occurred, which was measurably relieved by morphia. At the end of twenty-four hours, although the pain was endurable, we found that much more decided pressure was required to restrain the pulsation in the tumor; this difficulty continued to increase, as well as the pain, which became very severe, especially at the time of changing hands, and finally, at midnight on the 2d, after having been faithfully maintained during thirty-six hours, it was found necessary to discontinue the pressure.

The condition of the tumor was apparently unaltered. Some inflammation of the integuments followed, at the point of pressure, which terminated in an impetiginous eruption, and two weeks elapsed before the parts were in a proper condition for the operation.

On the 17th of August, I applied a ligature to the external iliac artery, at a point about an inch and a quarter above Poupart's ligaments, adopting the operative method recommended by Mott. The patient was placed fully under the influence of a mixture of chloroform and ether, (equal parts by weight,) which was kindly administered by my friend, Dr. Metcalfe, who was present, with Professors Mott, Parker, Dr. J. P. Batchelder, and a number of medical gentlemen. The anæsthetic influence was perfect, and the operation, consequently, performed without the slightest delay. I was particularly struck by the entire immobility of the abdominal muscles, whose almost constant and involuntary motions are so apt to annoy the surgeon during this operation.

The slightest possible chill and fever followed, within the first twenty-four hours, after which no morbid symptoms occurred. Adhesion took place in the wound—without any evidence of local inflammation.

The limb retained its natural sensibility, but became about 5° colder than its fellow—which difference in temperature has persisted, with very little diminution, to the present time. The ligature came away on the 17th day, and the slight fistulous opening left by it was entirely closed by the expiration of the third week. At the end of the sixth week the tumor had diminished to the size it possessed when first discovered, and my patient left the city well satisfied with his condition. At this time I could discover no pulsation in either of the tibial arteries, although they could be felt to be tense, and apparently filled with blood.

The only point of particular interest in connection with this case is the attempt at treatment by compression, applied to the external iliac artery by manual pressure, which as far as I am informed, was not warranted by any precedent. There is a case on record, to which I am not at present able to refer, in which instrumental pressure was successfully applied to this artery for the purpose of restraining hemorrhage; it was sustained for some time, and although its object was attained, an extensive eschar followed. In 1816, Dupuytren tried systematic pressure, applied half an inch above the crural arch, in a case of inguinal aneurism, by means of an instrument similar to those at present in vogue, the sacrum being taken as the point of counter-pressure. A second instrument, on the principal of the ordinary spring truss, was also employed in the same case. Both attempts were unsuccessful, from the inability of the patient to bear the pain of the pressure, and the disease was subsequently cured by ligature of the artery.—*Leçons Orales*, Paris, 1834, t. III., p. 540.

The failure in the present instance is attributable to the amount of pain produced by the pressure; to the consequent swelling of the parts situated over the artery; and, principally, to the spasmodic action of the lower portion of the internal oblique and transversalis muscles, which rendered it extremely difficult to prevent the artery from rolling beneath the fingers, and thus escaping from even an increased amount of pressure. The first obstacle is not an insuperable objection; my patient bore the pain well, and could have borne it for a longer time; the two latter seem to be inherent in the method employed. With these difficulties in view, however, I should not entirely despair of success, by this method, in a thin subject moderately tolerant of pain. In any case, the attempt could not exert other than a favorable influence upon the success of the subsequent operation, by throwing the stress of the circulation temporarily upon the anastomozing branches, and thus contributing to their enlargement, an object which can never be regarded as entirely unnecessary, inasmuch as gangrene follows this operation sufficiently often, even uuder the most favorable circumstances, to keep the surgeon ever alive to its danger.*

There are several cases on record, of inguinal aneurism, in which pressure applied directly to the tumor has succeeded in curing the disease.

Dr. Albers, (*Med. Chir. Trans.*, Vol. IX.,) relates a case in which the patient having refused to submit to an operation, pressure was applied to the tumor by means of a pad and screw, at first it could not be borne on account of the pain, but it was afterwards continued more moderately, for a period of seven months, at the expiration of which time the disease was found to have been cured. The same surgeon relates a second instance in which pressure was continued for *six years*, without success; some benefit must, however, have followed the remedy in this case, as the disease would not probably have continued so long a time without a fatal result, if it had not been employed.

Dr. O'Bryan Bellingham, (*Dublin Quart. Jour.*, Vol. XXII.,) employed pressure by means of straps and bandages, with a good result, for an aneurism of the external iliac artery for which he had previously applied a ligature to the same vessel,† the disease having reäppeared a year later.

A case is recorded in the *Lon. Med. Gaz.*, 1845, in which Mr. Luke succeeded by the same means in curing his patient; and a similar instance of success was obtained by Mr. McCoy, of Dublin, (*Dub. Med. Press*, Vol. IX.)

These cases, which are of course exceptional, deserve, nevertheless, to be borne in mind, in connexion with those treated by compression, during the last century, by Guattini. They serve to exemplify the value of a resource, which, although rendered comparatively unnecessary by the brilliant operation of Abernethy, might prove, under certain circumstances, of immense utility to the surgeon.

The following case, which, by the kindness of Dr. Mott, I am permitted to record, presents points of more decided interest—in the unusual nature of the disease and its melancholy termination, and especially in connexion with the important question of surgical practice which it involves.

II. *Arterio-venous Aneurism near the groin; ligature of external iliac artery; death from gangrene.*—Mr. H. C. O., of Barbour county, Alabama, 21 years of age, of slight build, and previous good health, received in an affray, in the month of July, 1844, a wound from a pistol ball, which entered about an inch and a-half below the ant. sup. iliac spine on the right side, and traversing the front of the thigh in a line directed obliquely downwards and inwards, lodged immediately beneath the skin on the inside of the limb, about two inches below the pubes. There was a great gush of blood at the time of the accident, which was, however, readily staunched by pressure, and did not again recur; the wound healed without difficulty, under ordinary treatment, the ball being removed by incision.

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* See note p. 176.

† This case is incorrectly stated by Mr. Crisp (*Dis. &c. of Blood-vessels, Lond.* 1847, p. 249,) to be the first on record, in which the external iliac has been tied for aneurism of this vessel. The case of our countrymen Dr. Jameson, of Baltimore, (*vide Philad. Med. Recorder*, 1822, Vol. V., p. 118,) has the precedence by twenty years.

Shortly after his recovery a pulsating tumor was discovered just below Poupart's ligament, over the track of the femoral vessels.

Early in December, 1846, he arrived in New-York to place himself under the care of Dr. Mott. At this time there was a general enlargement of the upper fourth of the thigh, with considerable induration, and, over a space some 3½ inches in diameter, in the position described above, a strong aneurismal pulsation was felt, accompanied by a very distinct and peculiar *purring* thrill. There was no marked prominence at any point, constituting a distinct tumor. Pressure upon the external iliac artery, arrested the pulsation and thrill in the tumor. At the point where the femoral artery enters the tendon of the *adductor magnus,* its pulsation could be felt, perhaps more distinctly than usual, but without any perceptible thrill. On the upper part of the thigh there were a number of enlarged superficial veins, and at several points below were patches of permanently distended capillary vessels. There was also a small ulcer on the leg of two months' standing. Some numbness and weakness of the limb were complained of, which rendered active exercise inconvenient.

On the 16th of December, at 2 o'clock P. M., a ligature was applied to the external iliac artery, by Dr. Mott, with the immediate effect of stopping all pulsation in the tumor. The operation, although its details were executed in the most perfect manner, was badly borne by the patient, who was laboring under much nervous excitement, and exceedingly sensitive to pain. Some prostration followed; a good deal of pain was complained of in the wound, and a sensation of numbness throughout the limb. The patient was conveyed to bed; the limb, whose temperature had diminished considerably, was enveloped in carded cotton, and a full anodyne administered. At 7 o'clock P. M., there was still much pain complained of, with anxiety and restlessness. Pulse 56; very small. The limb was 7 or 8 degrees colder than the sound one, and there was no sensibility on pinching smartly the inside of the calf. Bottles of hot water were ordered to the limb, outside of the cotton, and 20 drops of Magendie's solution of morphine, to be given immediately.

December 17th, 1½ o'clock P. M. The patient had dozed uneasily through the night, with less complaint of pain, and was still somewhat under the influence of morphine. He complained of vague, dull, tensive pain about the lower part of the abdomen. Slight oozing had occured at the wound of bloody serum. The limb had become warmed from the contact of the hot bottles, but there was no sensible increase of its natural heat, and no evidence of sensibility. There was a mottled, purplish appearance about the foot. Pulse 64, weak and quick, although less feeble than the night before. An enema of catnip tea was directed, with anodyne if required.

On the 18th, at 1½ o'clock P. M., he complained of pain in the abdomen on motion, with a sensation of internal heat, and great weakness. The tongue was moist and whitish; the skin natural; pulse 76, rather fuller, though weak, soft, and irregular in rhythm and force, with an occasional intermission. Stomach irritable; he had vomited in the course of the night, by which the oozing from the wound was increased. No pulsation could be detected in any of the arteries of the limb; its temperature was the same,—the purple patches on the foot more marked.

On pinching the skin of the leg to ascertain if it possessed the slightest sensibility, the cuticle gave way under the fingers.

On the 19th, at 1½ P. M., the patient no longer complained of pain; his pulse was 78; soft, and less irregular; the limb was cold, insensible marbled in appearance, and vesicated at several points. There was much irritability of stomach, which a julep of ammonia and camphor had failed to relieve; weak wine-whey was substituted, which appeared to agree well.

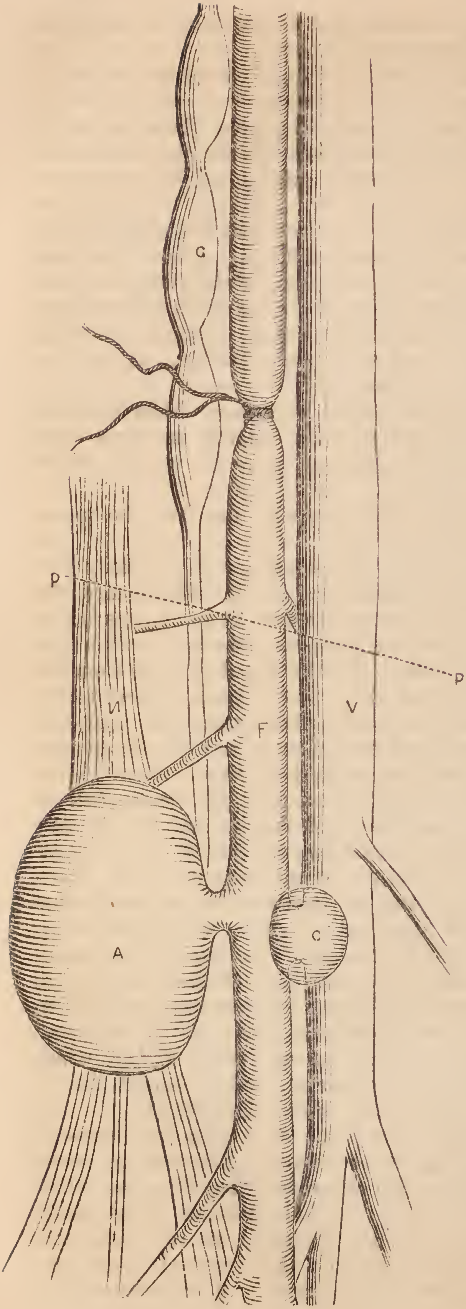
December 20th, 9 o'clock A. M. The patient was insensible except when aroused, and lay in a low muttering delirium. There was some jactitation; no hiccough; no tension of abdomen. Pulse 120, weak and irregular; tongue white and moist. The limb was livid and mottled, covered with bullæ containing bloody fluid; emphysematous crackling was felt on pressure, and its odor was extremely offensive. A solution of chloride of soda was applied on cloths.

On the 21st, at 1 o'clock P. M., patient comatose. Heart's action very weak and intermitting; no pulse at wrist. Hands and feet cold. The limb was in a state of complete sphacelus up to the wound, which was dry, black and gaping.

He died on the 22d, at 4 o'clock A. M., the sixth day from the operation.

Autopsy at 10 o'clock A. M. The whole surface of the body presented a very marked yellow tint. The wound of the belly formed the limit of the sphacelation above. I prolonged it four or five inches either way, and carefully breaking down the fibrinous adhesions, which had already acquired some firmness, raised the abdominal parietes from the peritoneum, and exposed this membrane. For a space of three inches around the wound it presented marks of inflammation, viz: increased vascularity, and an irregular coating of fibrine on its surface; on opening its cavity, it was found elsewhere to be perfectly healthy. Through the wound thus made, I divided the aorta and vena cava just above their bifurcation, and detaching them from the psoas muscle and the internal iliac, I cut through the crural arch, and tracing the vessels into the spacelated mass below, removed a portion sufficiently large to include all the disease, which was placed immediately in spirits to harden for further examination. The other viscera examined, as well as the great vessels, were healthy, with the exception of the heart. It was somewhat enlarged; the walls of the left venticle were one third thicker than natural, and the *columnæ carneæ* presented a yellowish appearance at their termination in the *chordæ tendiniæ.* The mitral valve was slightly contracted. All the four cavities of the heart contained masses of fibrine, which was generally quite free from coloring matter, and presented the appearance of having been deposited some time before death.

On examination of the morbid parts, some days after their removal, the ligature was found upon the artery about an inch and-a-quarter above the origin of its epigastric and circumflex iliac branches, which occupied their normal position. The cellular investment of the artery, which was disturbed only at the point of ligature, was vascular, thickened by effused fibrine, and more adherent than natural to the vessels, for some little distance above and below. A coagulum filled



the artery from the ligature to the bifurcation of the primitive iliac. On the outer side of the artery, in the vicinity of the ligature, were three lymphatic glands, inflamed and enlarged to three times their natural size.

Below Poupart's ligament, over the course of the pistol ball, the tissues were found to be considerably thickened and indurated. On carefully isolating the vein, artery, and anterior crural nerve, the following appearances presented themselves : an inch and-a-quarter below Poupart's ligament, and half an inch above the origin of the *profunda*, on the external side of the common femoral artery, and lying upon the nerve, was a true pouched aneurism, the size of a Madeira nut, communicating with the artery by a jug-like neck as large as the orifice of the profunda. Immediately opposite to the orifice of the aneurismal sac, was a preternatural opening in the artery, leading directly into the femoral vein. This opening was somewhat larger than the caliber of the artery. Over the abnormal communication between the femoral vessels, and involving apparently the walls of the vein as much as those of the artery, was a second true aneurismal pouch the size of a rifle bullet, communicating with the vessels by a neck as large as the epigastric.* The walls of both of these aneurismal sacs contained a very considerable amount of calcareous matter, and in the cavity of the larger tumor were found layers of stratified fibrine. The walls of the vein between the seat of the disease and Poupart's ligament, were thicker than those of the artery; below the disease the coats of the artery were thinner than natural. The vessels were otherwise normal. The anterior crural nerve was thickened, enlarged, and closely adherent to the larger aneurismal tumor. It is proper to mention that, before the operation, Dr. Mott expressed the opinion, that a communication probably existed between the artery and vein.

The occurrence of arterio-venous aneurism in the upper part of the thigh is rather rare; Hennen mentions a case following the wound of a musket ball, and Hodgson an instance in which it was produced by a thrust from a red-hot poker; the remaining eight or ten cases on record were caused by punctured wounds by a cutting instrument.

It is a question of pathological interest as to the manner in which the disease was produced by the wound of the pistol ball. I cannot think that the artery was opened by the ball at the time of the wound, although the vein apparently was. From the evidence of the patient it could not be ascertained that the blood lost at the time of the accident was arterial in its character; from the readiness with which it was arrested by simple pressure, it would seem to have been entirely venous. A portion of the wall of the artery, as well as of the vein, was, most probably, deprived of life by the ball in its passage; and, on the separation of the slough, the arterial current forced a passage into the vein. There was no hemorrhage, either externally or into the cellular tissue of the limb at this time; and the external wound shortly healed. The arterial coats had however undergone so much alteration, that in a little time they yielded, and the formation of the true aneurism, was the result.† We have thus in this instance the singular coincidence of true aneurism, from disease of the arterial coats, with a communication existing between the artery and vein.

A question now arises of more importance: what was the cause of the gangrene of the limb which followed the ligature of the artery?

The patient was young, moderately vigorous, of healthy constitution; and the disease had existed for two years and a half. The slight mitral contraction, and hypertrophy of the left ventricle, can hardly be taken into account. Under these circumstances, the danger of gangrene after ligature of the main arterial trunk of a limb, for simple aneurism of moderate size, is not great.* I am forced to the conclusion that in the present case, the unnatural communication existing between the vein and artery was the main cause of its unfortunate issue; and this conclusion I shall attempt to justify.

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* The wood-cut will convey a more difinite idea of the position and relation of the parts implicated in the disease:—The dotted line *pp*, represents Poupart's ligament; F, the artery; V, the vein; N, the anterior crural nerve; A, the larger aneurismal tumor; C, the smaller tumor, beneath which the abnormal opening between the vessels is situated; G, one of the enlarged lymphatic glands.

† That the aneurismal tumors involved the coats of the arteries alone there is no doubt; and in the larger tumor the internal lining of the artery is distinctly continuous with that of the sac. The fact is further confirmed by the bony deposit existing in the walls of both tumors; bony transformation being a rare consequence of inflammation except in the arterial tissue.

In reviewing the surgical history of arterio-venous aneurism,† with the view of determining the results which have followed the application of the Hunterian operation to its cure, I find a singular discrepancy existing between the opinions of authors and the recorded results of practice.

Hodgson, (*Diseases of Arteries, etc. Lond.*, 1815, *p.* 507), thinks it "probable that tying the artery above the tumor would effect the cure of this disease in the same manner as it does that of circumscribed aneurism—especially where the tumor is increasing," and adds that he is not aware that the operation has been tried.

About this time, Mr. Atkinson of York, (England,) tied the brachial artery for a large and increasing aneurismal varix, and mortification of the limb ensued. (*S. Cooper, Surg. Dict., Lond.*, 1839, *art. Aneurism.*)

Scarpa, (*on Aneurism, Wishart's translation, Edin.*, 1808, *p.* 397), expresses the opinion that the surgeon should "not hesitate to perform the operation (of Anel,) if the aneurism is still small and circumscribed."

Physick, shortly afterwards, tied the femoral artery for an arterio-venous aneurism below the knee; the limb mortified, and the patient died from hemorrhage. (*Dorsey's Surgery, Philad.*, 1813, *vol. 2d, p.* 210.)

Liston, in recent cases, advocates the Hunterian operation, and, at the same time, acknowledges that he has found it unsuccessful in more than one instance. (*Prac. Surg., Lond.*, 1847, 4*th Ed.*)

Miller says, "if the disease have existed long, and be of large size, etc., it may be treated on the Hunterian principle." (*Princ. Surg.*, 1*st Am. Ed., p.* 342.)

Mott prefers the Hunterian operation, except in recent cases, and in the least serious form of aneurismal varix. (*Velpeau's Oper. Surg., Am. Ed. vol. 2d, pp.* 292–3.)

Dupuytren decides, that "although reason would induce us to employ the operation of Anel in this disease, experience has demonstrated its inefficiency." (*Leçons Orales, t. 3e, p.* 145, 2*e Ed.*)

Breschet, (*sur les Anévrysmes, Mem. de l'Acad., t. 3e,*) reports two cases in which he employed the simple ligature of the artery without success; and also two cases with a similar result operated upon by Dupuytren, one of which terminated in gangrene. He expresses the following opinion: "La ligature du tronc artériel, d'après la méthode de J. Hunter, appliquée aux anévrysmes variqueux, est donc dangereuse, la plus souvent funeste, et le moindre de ses inconvéniens est d'être insuffisante."

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* Out of 155 cases of ligature of the external iliac, of which I have a record, gangrene of the limb has followed the operation for simple aneurism, in 16 cases. Dr. Norris (Table showing the mortality following ligature of iliac arteries, Am. Jour. Med. Sci., Jan., 1847,) gives 9 instances of gangrene occurring under similar circumstances, out of 118 cases

† For the sake of brevity I employ the term *arterio-venous aneurism* as including the different varieties of disease involving an abnormal communication between an artery and vein, as, in the present view of the subject, this circumstance is alone of importance.

Lisfranc, (*de l'Oblitération des Artères, etc.,Paris,* 1834); Begin, (*Nouv. Elém. de Chir. t.* 2*e, p.* 75, 2*e éd.*); Boyer, (*Mal. Chir., t.* 2*e, p.* 192); Malgaigne, (*Méd. Opér., Paris,* 1837, *p.* 204); Guthrie, (*Dis. of Arteries, Lond.,* 1830, *p.* 334); John Burns, (*Princ. of Surg., v.* 1, *p.* 486) Syme, (*Path. and Prac. Surg., Edin.,* 1848, *p.* 292), and Park, (*Med. Facts and Obs. vol.* 4*th, p.* 111), give a decidedly unfavorable opinion with regard to the Hunterian operation. S. Cooper, (*Surg. Dict., loc. citat.*) and Velpeau, (*Med. Oper., Paris,* 1839, *t.* 2*e, p.* 186), express themselves with much hesitation as to its propriety. A more recent writer, (*Rodrigues, Obs., etc., sur l'anév. variqueux. Gaz. des Hôp., Jan.* 1841) thinks that if accompanied by compression, applied to the tumor, " the operation of Anel may hereafter become more successful."*

It is worthy of remark that neither Astley Cooper (*Surg. Lect., Phil.* 1826, *vol. II.* p. 37,) nor Colles, (*Surg. Lect., Phil.* 1845, *p.* 197,) had encountered a case of this disease which seemed to require operative interference.

Most of the authorities who oppose the application of the Hunterian principle to the cure of arterio-venous aneurism, base their objections to the operation upon its inefficiency; inasmuch as experience has shown that the disease almost invariably returns after its performance. The danger of gangrene is only alluded to incidentally. Breschet recognises it, and attempts an explanation of the mode in which it occurs. S. Cooper (*ut supra*) adopts Breschet's rationale, and bases his unfavorable opinion of the operation upon it, and a case of Sir Charles Bell, which was followed by gangrene. The author of the article on aneurism, in the Cyclopædia of Surgery, asks the question why gangrene of the limb occurs more frequently after ligature of its main arterial trunk for this disease, than for the other varieties of aneurism; but he leaves it unanswered; and the question of the propriety of the operation, unsettled.

Breschet accounts for the occurrence of the gangrene in the following manner: He asserts (*loco citato,* pp. 209, 252,) that he has seen in the living body, (during an operation upon a case of arterio-venous aneurism,) the alternate exchange of contents carried on between the artery and vein through the unnatural opening, by means of which a portion of the venous blood is carried again to the limb by the artery, and an equal amount of arterial blood is returned unused to the heart, by the vein. The limb, thus habitually deprived of a portion of its arterial supply, loses proportionally its size, strength, temperature, and sensibility; and moreover, according to our author, its arteries below the seat of the disease, invariably undergo alteration—becoming larger in their caliber, thinner in their walls, and much more tortuous in their course, thus resembling veins. Premising these facts, which are considered as demonstrated, if in this condition of the limb, its main artery is tied between the disease and the heart, the arteries below the disease, from their changed condition, being unable to contract upon the diminished quantity of blood conveyed into them through the collateral channels, the circulation is not carried on, and the vitality of the limb, already lessened, is thus entirely annihilated.

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* A case is recorded (London Lancet, Oct, 1834, p. 144,) of varicose aneurism at the bend of the arm, in which the communication with the vein was obliterated by pressure, and, the disease being thus reduced to a simple circumscribed false aneurism, the brachial artery was tied successfully by Mr. Lloyd.

Thus it appears that Breschet attributes the gangrene solely to the altered condition of the arteries of the limb below the seat of the disease.

Now this change in the arteries, although it undoubtedly exists, as in the cases reported by Breschet, is not admitted by some authors to be of uniform occurrence, in fact in the present case it was by no means well marked. It seems to me, that in addition to this explanation, there is another circumstance to be taken into account, which is not altogether without its importance. According to Breschet's evidence, when a communication exists between an artery and a vein, a portion of the arterial current passes into the vein at each systole of the heart, and during its diastole, a counter-current of venous blood overflows into the artery. Now, when the arterial current is arrested by a ligature, the systolic impulse conveyed through the devious collateral channels is barely perceptible, if it exist at all, by the time that the blood has reached the main trunk below the ligature, and therefore, the current through the vein not being interrupted, we may readily infer that it would overflow into the artery through the abnormal opening more freely than before, as it meets with no opposing current from the artery. Thus the arterial blood received by the limb through its anastomozing arteries, already perhaps deficient in quantity, and degenerated in character,* is still farther depraved by constant and free admixture with the effete venous blood of the limb.

Hence I would infer that, in the present case, the circumstance of the abnormal communication was, probably, the principal cause of the gangrene. Prof. Horner suggests, (Am. Jour. Med. Sci., Jan., 1841,) that the arterial blood brought into the limb under these circumstances finds its way back to the heart so much more readily through the unnatural opening, than by its ordinary route through the capillaries, that it is thus deprived of a sufficient arterial supply.

Thus far for the manner in which gangrene is brought about; it remains to be determined in what proportion of cases of arterio-venous aneurism, treated on the Hunterian principle, it occurs; and in what class of cases it is most to be dreaded. The only mode of settling this question is by investigating the records of surgical practice, and drawing conclusions from the results of actual experience. Dupuytren's conclusion with regard to the treatment of this disease, at the time it was made, was no doubt as correct, as it is unsatisfactory: "La chirurgie est riche en méthodes, et en procédés opératoires, mais elle est pauvre en faits bien observés sur lesquels on puisse établir la preëminence ou l'infériorité de ces méthodes et ces procédés." May there not have been accumulated by this time sufficient evidence to justify us in advancing one step farther in our knowledge of this intricate subject.

The following cases, derived from sources within our reach have been thrown together in a tabular form for the purposes of analysis.

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* The dark color and continuous flow of the blood in hemorrhage from the distal extremity of a wounded artery, demonstrate that it has already lost some of the qualities of arterial blood, and that it is certainly not as well able to support the vitality of a limb, as that received directly from the heart.

TABLE OF CASES SHOWING THE RESULT OF THE HUNTERIAN OPERATION IN ARTERIO-VENOUS ANEURISM.

NO.	SURGEON.	WHERE RECORDED.	SITUATION OF DISEASE.	DURATION OF DISEASE.	ARTERY TIED.	CONSEQUENCES OF OPERATION, AND REMARKS.	FINAL RESULT.	PERIOD OF DEATH.
1	Atkinson.	S. Cooper, Surg. Dict., Art. Aneurism, p. 191.	Bend of arm.		Brachial.	Gangrene of limb.		
2	Chas. Bell.	Idem.	Bend of arm.		Brachial.	Gangrene of limb.	Death.	
3	Physick.	Dorsey's Surg., Philad., 1813, vol. 2d, p. 210.	Below the knee.		Femoral.	Gangrene of limb. Hemorrhage.	Death.	
4	Collier.	Med. Chir. Trans., vol. vii., part 1st, p. 136.	Upper part of thigh.	2 months.	Ext. Iliac.	Gangrene of limb.	Death.	4th day.
5	Perry.	Idem., vol. xx.	Near the knee.	4 years.	Femoral.	Hemorrhage.	Death.	6th day.
6	Dupuytren.	Breschet sur les Anevrysmes; Mem. de l'Acad. Roy. de Med. t. iii. p. 223.	Upper part of arm.	2 years.	Brachial.	Disease re-appeared in a few days.	Amp. of limb.	
7	Dupuytren.	Idem., p. 226.	Lower third of thigh.	6 months.	Femoral.	Gangrene of limb. Hemorrhage.	Death.	28th day.
8	Breschet.	Idem. p. 212.	Bend of arm.	3 months.	Brachial.	Disease returned in a few days. Artery afterwards tied above and below the disase.	Cure.	
9	Breschet.	Idem., p. 219.	Bend of arm.	8 days.	Brachial.	Same results.	Cure.	
10		Cloquet; Pathol. Chirurg., p. 85.	Bend of arm.		Brachial.	Disease returned. The limb became atrophied, the fingers livid, and the nails fell off.	Amp. of limb.	
11	Morrison.	Am. Jour. Med. Sci. vol. xxii, 1838.	Groin.	11 years.	Ext. Iliac.	Gangrene of limb.	Death.	3d day.
12		Hennen; Mil. Surgery, Edin., 1820, p. 183.	Groin.	a few weeks.	Ext. Iliac.	Gangrene of limb.	Death.	In a few days.
13	Baroni.	Archives Generales, 1840.	Upper part of thigh.		Ext. Iliac.	Return of disease on 5th day; partial gangrene of limb; secondary Hemorrhage; ligature of Femoral.	Death.	54th day.
14	Lallemand.	Gaz. Med., 1841.	Upper part of thigh.	5 years.	Femoral.	Hemorrhage. Ext. Iliac afterwards tied.	Death.	5th day.
15	Lawrence.	Ormerod; Clin. Surgery, London, 1846, p. 145.	Upper third of thigh.	13 weeks.	Com. Fem'ral.	Gangrene of limb; amputation.	Survived.	
16		Lond. Med. Gaz., vol. xxvii., p. 143	Bend of arm.	22 days.	Brachial.	Extensive swelling of limb; gastric symptoms; diarrhœa.	Death.	21st day.
17	Chelius.	Gaz. Medicale, 1843, p. 530.	Rt. temporal region.	14 months.	Rt. prim. Car.	Return of disease after third day.		
18	Mott.		Upper third of thigh.	2½ years.	Ext. Iliac.	Gangrene of limb.	Death.	6th day.
19	Alquié.	Velpeau; Med. Oper. t. ii., p. 186.	Bend of arm.		Brachial.	Hemorrhage; artery tied a second time; hemorrhage returned repeatedly; finally compression effected a cure.	Cure.	
20		Roux; Gaz. Med., 1837, p. 347.	Bend of arm.		Brachial.		Cure.	
21	T. Harris.	Prof. Horner; Am. Jour. Med. Sci., Jan. 1841, p. 74.	Upper part of thigh.	3 months.	Com. Fem'ral.	Gangrene of limb; return of disease.	Death.	31st day.
22	Baynham.	Am. Jour. Med. Sci., Oct., 1841, p. 480.	Middle of the thigh.		Femoral.	Hemorrhage; disease returned.	Survived,	

In addition to the cases included in the table, there are two others recorded, in which the result was unsuccessful: one by Portal, (*Chir. Chirurg.* t. i., p. 203,) and another by Brown, (*Velpeau, Med. Oper.* t. ii., p. 186.)

Thus we have 24 cases of arterio-venous aneurism treated by ligature of the artery between the disease and the heart, in which 23 were unsuccessful, and one only is said to have been cured. And this solitary case of cure is the only one included in the table whose authenticity is at all equivocal. It was that of a man exhibited to Roux as a surgical curiosity, at Milan, in Italy, during his visit to that country in 1836, and reported by him, on his return, to the Academie Roy. de Med., of Paris. Velpeau (*ut supra*) expresses a doubt as to whether the disease was in reality arterio-venous aneurism.

In the 22 cases, death followed, as a consequence of the operation, in 12; the result of one case is doubtful, and 9 survived. Of the survivors, one is the case of cure; three underwent amputation; and four were subsequently cured by other means.

In the 12 fatal cases, 6 died from gangrene; 2 from hemorrhage; in 3, both gangrene and hemorrhage contributed to the fatal result; and one perished from constitutional irritation.

In 9 of the 22 cases, the brachial artery was tied for the disease occurring in the upper extremity. Of these, one is the case of cure; two certainly died, and a third was probably fatal, (Mr. Atkinson's.) Of the remaining 5, two underwent amputation, and 3 were subsequently cured by other means, viz., two by ligature of the artery above and below the disease, and the third by compression, after repeated hemorrhages. In the upper extremity gangrene occurred twice, and in a third instance, (10) the condition of the limb approached so nearly to gangrene that amputation was performed. In the instance in which the common carotid was tied, the disease was ultimately cured by the operation of Kiesler.

In the 12 cases of the disease seated in the lower extremity, the external iliac artery was tied, primarily, five times, and gangrene followed in all. The common femoral was tied twice; gangrene followed in both. The femoral artery was tied five times; gangrene followed in two of these cases, and hemorrhage in all. In one instance, (14) the external iliac was tied for hemorrhage following the ligature of the femoral, without preventing a fatal result. In fact, the only cases in which death did not follow the operation in the lower extremity, are those of Baynham, whose patient survived after a very serious secondary hemorrhage, and Lawrence, who had recourse to amputation during the progress of the gangrene.

The hemorrhage in these cases is due, beyond a doubt, to the altered condition of the arteries consequent upon the disease, and this is a circumstance which has not received the degree of attention which its importance demands. It furnishes an additional argument against the Hunterian operation in this disease, and is calculated to interfere materially with the success of any operative process undertaken for its cure. It occurred in 7 out of the 22 cases included in the table, and in 5 it was more or less directly the cause of death.

In the sound and judicious remarks appended by Dr. Norris to the notice of Lallemand's case (14), in the Am. Jour. Med. Sci., Oct., 1841, he asserts that, "all reason and experience on the subject go to show that no good result can be expected from the application of a ligature above the tumor in this disease."

Are we not fully justified by the facts thus set forth, with regard to the ligature of the artery on the Hunterian principle in arterio-venous aneurism, in arriving at the conclusion that the operation, not only promises no good result, but that its performance is absolutely unjustifiable?

In confirmation of this conclusion I am happy to have it in my power to state, that Prof. Mott, in view of the results shown above, admits its entire correctness, and has recently given an opinion adverse to that expressed by him in the Am. Ed. of Velpeau's Oper. Surgery, already quoted.

Art. IV.—*Remarks on Animal Poisons; with Cases.* (Communicated in a Letter to the Editor.) By Nelson Nevison, M. D.

Dear Sir,—Thinking that some of the facts connected with the following cases, though by no means *new*, might not be wholly devoid of interest, I have concluded to transcribe them. If they are of any worth they are at your disposal. In the autumn of 1844, I had under my care a patient, who had been for a number of weeks laboring under a low form of typhoid fever, from which he had nearly recovered, when he was suddenly taken with a severe and fatal relapse, the chief characteristics of which were, great prostration of strength, *colliquative sweats*, and diarrhœa. While attending this patient, I was seized with a moderately severe pain in one of my fingers, (there had been a slight scratch upon it for several days, but it was altogether so trifling as to attract little attention. The pain seemed to proceed from this point, which very soon became considerably swollen, with much redness; during the day the pain extended slowly up the hand and fore-arm, and at evening a red line, proceeding from this point, was visible as far as the wrist. Not being altogether pleased with its behavior, and unable satisfactorily to account for it, I was not entirely without apprehension that the absorbents might be engaged in conveying some kind of morbific matter into the system, and my suspicions were not a little strengthened by the recollection that while visiting my patient the previous evening, I assisted the nurses somewhat in applying some stimulating frictions to the algid limbs of my patient, which were at the time bathed in a most *profuse perspiration.*

On the following day the redness and pain extended still further up the arm. Being, however, actively engaged at the time, little notice was taken of it.

On the third day, there was considerable swelling, pain, and tenderness of the glands in the axilla: the red line extended the entire length of the arm. By the fourth day, the symptoms about the finger began to subside; pain in the axilla much increased. Fifth day, no pain in the finger; the red line slowly receding up the arm. From this time to the eighth day, the symptoms were principally confined to the axilla, steadily increasing. On the eighth day, the swelling, pain, etc., in the axilla began to subside. During this day I had a severe headache, great sensation of weariness, occasional rigors, pain in the loins, an almost irresistible disinclination to exertion of any kind, so that it was with the greatest difficulty that I attended to my professional duties.

On the following day the symptoms in the axilla had nearly subsided. The pain in the head and loins had extended to all parts of the body. Chills and hot flashes quickly alternating, giddiness, nausea, trembling, unsteadiness in all kinds of muscular movements, great weakness, tongue slightly coated with a yellowish fur, pulse not materially changed, somewhat irregular, soft and compressible. Symptoms all materially increased towards evening.

On the following morning, the swelling in the axilla had entirely disappeared. There was well marked *remission* of all the symptoms. This, however, was of but short duration, the symptoms of the preceding day returned with increased violence, with this difference, that there was less of chilliness, and the aching pain, that was before diffused throughout the body, seemed to be concentrated in the head; and, although it brought no relief, I could not resist the inclination to be constantly *rolling* the head from side to side, it really seemed *heavier* than all the rest of the body. Cold applications were very grateful. The treatment up to this time, consisted in little else than freely evacuating the alimentary canal. First by a gentle emetic, (during the operation of which a general diaphoresis was induced,) and aferwards by a brisk mercurial purge.

During the three following days no material change occurred, except that remissions were less and less observable, and the symptoms on the whole slightly augmented in severity from day to day; the pain in the head became less acute, but was followed by an indescribable sensation of *heaviness;* and although it was kept constantly elevated, the sensations conveyed the impression that it was yet much *lower* than any other part of the body, and it appeared that its great *weight* was constantly drawing the rest of the body not upward, but *downward* after it; a sensation of drowsiness and an inclination to sleep was more and more perceptible, pulse about 100, tongue heavily coated, scarcely any thirst, *appetite but little impaired.* Blisters were applied to the nape of the neck, and extremities, and efforts were made to secure the revulsive effects of mercury.

The next day (being the seventh day of the fever, or the fourteenth from the commencement of the pain in the finger) was marked by the occurrence of a most *copious diaphoresis.* This was regarded by a professional friend as a favorable indication. He also thought he discovered indications of the specific influence of mercury on the system, and by his advice its further administration was omitted. The profuse sweats continued throughout this and the following day, but contrary to the predictions of my friend, an improvement in the symptoms did not follow, their effect was to produce great and even alarming debility; this debility seemed in many respects analogous to that which follows copious and repeated venesections, the surface and extremities were cold unless warmed by artificial heat, which in its turn increased the perspiration. The sweats communicated an *oily* feel to the surface, it seemed that all the adipose substance in the body was being dissolved and passing through the pores of the surface. After two days the sweating gradually subsided, but the case had materially changed; the symptoms were now preëminently *typhoid;* pulse 120 to 140, tongue heavily coated with a dark brown fur, teeth covered with sordes, the skin retained its *oleaginous* feel. The nervous system was remarkably active, great intolerance of light and sound, great watchfulness. The mental faculties exceedingly active, thoughts of the most beautifully sublime and brilliant character followed each other in rapid succession. To investigate a subject the most dark and inexplicable, comprehend its mysteries, and dismiss it for another still more complex, was the work of a moment, no obstacle too great to be readily overcome, no problem too abstruse to admit of a speedy solution. And thus for hours and days, the thoughts continued to travel with but slight intermissions, with the speed of lightning, manifesting little or no disposition to become weary.

This state of things continued for about another week, during which time the treatment was given up to two of my professional friends, who certainly are not obnoxious to the accusation of a lack of orthodoxy, for the alpha and omega of their creed, calomel and opium were most freely invoked, the result of which was, that at the end of the week I was most horribly salivated; whether this did good or harm it is not now my purpose to inquire, suffice it to say that the cold surface now gave place to a violent mercurial fever, and the exhausting sweats to an equally exhausting drain from the salivary glands. Two weeks of this and all superfluous vitality had been disposed of. Two weeks more of vascillation between brandy and quinine on the one hand, and almost entire insensibility on the other, brought me to a state of convalescence, and at the end of three months from the time of the attack I was again able to leave the room.

Perhaps it may be well to state in this connexion, that a sister of the writer who was with him during the early part of his illness, was at the end of two weeks attacked with a disease in most respects similar to his, but was in all respects much milder, and lacked almost entirely the *exhausting sweats.* As soon as she was attacked she went home; about two weeks from that time two other members of the family were attacked; these cases were in all respects similar to hers but milder. In about two weeks more three other members of the family were attacked and passed through a mild course of fever.

My object being merely to give the facts, I forbear comments, but would merely state one or two points.

1st. That the disease was in the first place communicated by *innoculation,* I think can scarcely be doubted.

2d. Whether the copious and long-continued *sweats* which characterized my case may have been influenced by the contagion having been received from the *perspiration* of my patient, is not quite so clear.

3d. The facts in regard to the other cases would seem to favor the idea that the *contagion* may lose much of its virulence, or become greatly modified in passing through a number of individuals.

Art. V.—*Remarks upon the Use of Antimony (Tart. Ant. et Pot.) in the Pneumonia and Bronchitis of Children.* By H. N. Bennett, M. D., of Bethel, Ct.

No article of the materia medica has longer or more deservedly maintained a reputation in the treatment of acute pneumonic affections than antimony. It is not the design of the present paper to detract from its merits, but to inquire in what circumstances the use of this article should be avoided or discontinued in the treatment of the pneumonia and bronchitis of young subjects, particularly of those from one to six years of age. The tendency, at this period of life, to gastro-enteric irritations and inflammations is so great, that every plan of medication directed upon the alimentary mucous membrane, in such a manner as to excite the action and increase the secretions of the intestines, is accompanied with more or less danger to their integrity. It is for this reason that purgation, as an unique method or as the basis of treatment, is scarcely applicable to any of the diseases of early life. The physiological differences between the gastro-enteric mucous membrane of early and adult age, are unquestionably accountable, in a great degree, for the different therapeutic effects of those medicines which exert their principal influence upon this membrane. In childhood it possesses a greater degree of vascularity, and is more easily excited to increased secretion; it is more sensitive to impressions made upon it, and more readily communicates morbid irritations to the encephalic nervous centres; it is less tolerant of coarse, irritating or acrid ingesta, and their effects are sooner manifested in the disturbance or destruction of its functions; in short, it is more highly organized and *tender* than the mucous membrane of adult age.

The effects of emetic tartar upon the alimentary canal are well known. The first evidences of its action are nausea, vomiting and purging, accompanied by great prostration of muscular power and blanching of the cutaneous surfaces, and these effects are nearly the same in early and adult age. If the vomiting which occurs from the first few doses of the medicine, ceases after a continuance of its exhibition, it is not so generally the same, according to my experience, with its downward effects in children. Purging once excited by the use of this article, I have frequently seen exaggerated to a diarrhœa from the exhibition of even the smallest doses, and I have established it as a general rule in my practice, to discontinue the use of antimony as soon as there is any unusual looseness of the bowels, especially when the discharges become thin, colorless and more resembling serum than fæces, considering the latter as evidence of the irritating effects of the medicine upon some portion of the enteric mucous membrane. To persevere in the administration of antimony after these effects are produced, is, in my opinion, to hazard the safety of your little patient, by inducing an enteritis which may prove much more troublesome than the original disease, and will at least entail a protracted convalescence. An immoderate looseness of the bowels has also no curative effect upon the inflammation of the bronchial mucous membrane, or of the parenchymatous tissue of the lung itself, but rather the reverse. The sympathy existing between the mucous membranes of the air-passages and of the digestive apparatus, is well known. A bronchial mucous flux, or even a purulent expectoration, is suddenly checked by a diarrhœa.

Thus the natural relief of the inflamed bronchial membrane, or of the hepatized lung, to wit, an increased mucous or a purulent secretion, is retarded or suspended by the continual drain from the bowels, the respiration continues difficult and hurried, the hæmatosis is farther perverted, and the powers of life prostrated by the loss of integrity in the functions of the digestive tube.

The emetico-cathartic effect of the first doses of antimony, I consider by no means prejudicial in the treatment of the pneumonic affections of children, and I wish to be understood that the occasion for suspending its use, is an established diarrhœa, which I have found it difficult to control while continuing the administration of the medicine. The addition of a few drops of the sol. morph. to every third dose of antimony *may* restrain its purgative effects upon the alimentary canal, but the constant drowsiness or stupor induced as a consequence, is perhaps as dangerous as the diarrhœa, inasmuch as it compromises the cerebral functions, a thing always to be avoided in children.

There is but one circumstance which can render an excuse for the continued exhibition of antimony after the production of diarrhœa, and that is when the bronchial flux is excessive and threatens to suffocate your little patient by its quantity. I prefer, even in this case, the administration of simple cathartic medicines, and an occasional emetic dose of antimony, to any other method; for when the bowels have become once irritated by tartar emetic to the production of diarrhœa, it is often difficult to obtain an emetic effect, and we thus lose an important auxiliary in the treatment, which remedies, to a certain extent, the want of expectoration which is almost universal in children.

The best method which I have tried, of exhibiting antimony to children, with the view of obviating its irritating effects upon the stomach and bowels, is to make the solution in some mucilage, and add to each dose a few drops of spts. nitre, while at the same time the chest is to be completely enveloped in a flannel moistened with a warm infusion of hops. I think I have had sufficient experience to warrant me in asserting that children tolerate antimony in this manner far better than when given alone and without the application made to the cutaneous surface; and I am also positive that I have seen acute bronchitis in particular yield to this treatment in a remarkably short period of time.

The effects of antimony upon the alimentary canal, are more marked at certain seasons of the year, and during certain epidemic constitutions. According to my experience, it is borne with less tolerance during the summer season, when various causes combine to render the digestive mucous membrane more irritable and disposed to phlegmasiæ. It is true that pneumonic affections more rarely occur at this period of the year, but it is equally true that when they do occur, they are accompanied with much greater gastric irritability than is usual in the same diseases in the colder months. During the summer season I have many times found it impossible to establish the tolerance of antimony by the most careful management, vomiting would be reproduced by the smallest doses, and a gastro-enteritis follow upon a perseverance in its use. It has been my practice for some years, in those cases which manifested much gastric irritability to avoid the exhibition of emetic tartar altogether and substitute simple refrigerant drinks, thus falling back upon a mere expectant treatment, rather than irritate my patient by more powerful means. The pneumonia and bronchitis of summer and the early fall months, if unattended with complications, are much less dangerous and run their course more rapidly than in the winter season, and this should form a strong reason for proscribing any medication which may involve other organs and superadd a phlegmasia which will increase the danger of the patient.

Certain epidemic constitutions prohibit the use of antimony. It is not long since I witnessed an occurrence of this kind. During the last spring, soon after the decline of the epidemic erysipelatous fever which prevailed in this town, I had occasion to treat several cases of pneumonia among children, in which the exhibition of antimony was uniformly attended by a troublesome diarrhœa with alarming prostration. I could not induce a tolerance of this medicine, and did not prescribe it at all after the first few cases. This peculiar intolerance of tartar emetic, was probably owing to an unusual irritability of the alimentary mucous membrane, and a disposition to the diffuse inflammation which had characterized the epidemic of the winter. The occurrence of epidemic constitutions forbidding the use of antimony has been observed by some European writers, and is hinted at by MM. Barthez and Rilliet, in their invaluable work on the diseases of children.

The conclusions at which I have arrived in reference to the use of antimony in the pneumonic affections of children, may be summed up as follows:—

Young subjects are not as tolerant of tartar emetic as adults, owing to the greater irritability of the gastro-enteric mucous membrane; and its administration should be modified to accommodate this condition.

The exhibition of this medicine should be discontinued whenever diarrhœa takes place, especially if the alvine evacuations are thin, colorless, destitute of fæcal smell and consistence.

The tolerance of antimony is less during the summer and first fall months, and it should be given with caution, or perhaps avoided.

Certain epidemic constitutions forbid its use altogether, but these are only to be suspected by a trial of the medicine, and the observation of its effects upon a number of cases, in which it will uniformly produce troublesome symptoms and complications.

Art. VI.—*Remarks on the Mode by which Cholera is propagated; being an Attempt to reconcile the Conflicting Opinions of Medical Writers in relation to its Contagious or Non-contagious Character.* By Wm. H. Macneven, M. D., of New-York.

Setting aside the first origin of epidemic or pestilential cholera, the question which has occupied the attention of medical men since the occurrence of that event, has been, the mode by which the disease is propagated so extensively over the globe? Yet, to this time, whatever views have been set forth to explain the mode of its propagation, those by whom they have been advanced, have failed to reconcile their theories with *all* the facts which have been observed in its history. It is unnecessary to allude to the different meteorological and telluric influences to which its progress has been assigned. Many able and careful investigators of its history, declare that the difficulties encompassing the subject, on this ground alone, cannot be solved; whilst a large and most respectable class have settled down upon the belief that the pestilential cholera is propagated by human intercourse alone. So that the Sanitary Commissioners in Great Britain, in their last report, though they are opposed to the doctrine of contagion, "after the most careful investigations leave the point unsettled," and argue "that if such a reproduction did possibly occur, as an exceptional and unusual case, that practically it was unnecessary to regard it;"—and an able British reviewer writes, "that even if it be contagious, it cannot be localized and restrained by quarantines; that cholera does not require human frames for its transit and its multiplication: it is not bound in by lines, nor circumscribed by empty spaces; where it finds its conditions of existence, it can spread, although for miles no one is found whose frame may be the test of its powers."*

As it is my intention to advance certain views on this subject, which I think will account for the progress of this and other epidemics, without conflicting with the most anomalous facts in their history, I propose before entering upon the explication of these views, to survey, with as much impartiality as so limited a space will permit, such of these as have afforded the greatest ground for difference of opinion. The recent epidemic has offered no new features, and for the purpose proposed, there would be no advantage in referring to any other observations than those long known and well authenticated.

The contagionists assert, on one hand, that the epidemic cholera, when not originating spontaneously, can only be extended from its source to other places, through the intervention of persons or fomites infected by the pestilence; while the opponents of contagion deny that the epidemic is ever conveyed by persons or fomites infected with it, and that when not spontaneous in its origin, and strictly indigenous to the place in which it appears, it is due to a grand invasion of cholera atmosphere, wafted by the winds. Byrne, who in this country has written in support of the first opinion, says, "When we reflect on the utter impossibility of reconciling the progress of cholera with any one of the many hypothesis which the non-contagionists have devised, we cannot be surprised that they should have exclaimed, 'Its march is a mystery, and its ways are inscrutable!' To them it is indeed a mystery; for although it has been sixteen years travelling, and has in that time pervaded three continents, and crossed two oceans, they are still unable even to imagine how one step of this vast journey has been accomplished." He asks, and with good reason, in opposition to the idea of its absolute local origin in all places, "Why it should have travelled from Jessore to Moscow, from Moscow to Quebec, and from Quebec to New-Orleans, by one continuous chain of posts?" And he might have added, why make its appearance at these places successively in its route, and not cotemporaneously.

The same author observes: "From its origin at Jessore, it radiated as from a centre to a circumference, travelling north, south, east, and west, with various degrees of rapidity, until it reached the confines of Asia in every direction. As early as the year 1820, it reached Canton, 1500 miles east of Jessore, on the border of the Pacific; and had it travelled over that ocean with the same rapidity with which it crossed the Atlantic, it must have reached our north-western coast in 1822, and visited us not as an eastern, but as a western pestilence."

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* B. & F. Med. Chirurg. Review.

"It travelled from the sources of the Nerbudda into Bombay, in the teeth of a wind which prevails six months, night and day, with rather more rapidity than it did from Madras to Cape Cormorin, where a similar wind was in its favor."

Alluding to its atmospheric diffusion from a given place, he says, "the poison of cholera appears soon to become extinct, and thus it is exceedingly difficult to convey it to any great distance, unless it can be regenerated by new victims. So that in spite of the extensive intercourse between Europe and America, only two emigrant vessels, the brigs Carrick and Royalist, arrived at Quebec, on board which any passengers had died with cholera, the season it broke out in that city. And these two vessels, with the exception of the brig Brenda, at Baltimore, were the only vessels ever suspected of having conveyed this poison across the Atlantic. He, moreover, cites it as a striking fact in favor of the contagion of cholera, that in crossing a sea it always travels in a single line, and that line so narrow as to touch but a single city; whereas in crossing a continent it travels in thousands of lines.

It crossed the Atlantic, for example, in so narrow a line as only to have touched Quebec, whence it extended progressively over the country. If it had crossed the Atlantic in a *streak* of atmosphere, it must have passed over Nova Scotia and New Brunswick, before it reached Quebec; yet it did not visit those places until after it had ravaged the latter. On board the Carrick 42 deaths had occurred at sea, she arrived at Quebec the 3d of June, on the 6th, 7th and 8th, several cases of cholera appeared, and on the 9th, fifteen cases. This was the commencement of the epidemic cholera in the Western Hemisphere.

Another general fact on this point is alluded to by Kennedy: "Among the islands of the Indian Ocean it was observed that the cholera uniformly commenced its ravages in the sea-port towns," and he asks, "how can this extraordinary and uniform partiality which cholera exhibited in its choice of sea-port towns for its first inroad, be explained, unless on the principle of imported contagion?' The following among the instances noted by Byrne* is too strong to be omitted: "In Oct. 1832, the brig Amelia, with 108 persons on board, left New-York where the cholera was then prevailing, and on the 30th of the month, by which time 20 of those on board had died of cholera, she was stranded on Folly Island, about ten miles from Charleston, and in a day or two afterwards the disease began to spread among the inhabitants of that island. All access to the crew and passengers or the sick on the island, was rigidly interdicted by the authorities of Charleston. Folly Island forms a mere speck on the map of the Southern States, and yet that speck was the first and the only place for hundreds of miles round, where cholera appeared.

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* Reported in American Journal of Medical Sciences for 1833, by Dr. S. H. Dickson.

It was, too, the only port of the Southern States, at which a vessel with cholera on board had ever arrived. The introduction of cholera into Key West was parallel with this."

It would be easy to cite numerous instances, reported by the same writer and others, where the first appearance of epidemic cholera in different *inland places* in the United States immediately followed the introduction of persons sick with the disease. The two following are particular instances of contagion recorded by Dr. Byrne:

"Before any case of cholera had appeared in Utica, an Indian belonging to Oneida Castle, twenty-three miles west of Utica, was hired by the master of a passing canal boat, to bury a man who had died of cholera on board. The Indian procured some others to assist him, and immediately afterwards he and five other Indians were all seized with the cholera and died. This report appeared in the Utica Sentinel some days after the occurrence, up to which time no other cases had occurred and the country remained perfectly healthy. Four miles from Baltimore, near a place called Govanstown, which, with its neighboring country, was perfectly healthy, lived a Mr. Nicholas Gill and a Mrs. Dewees in two adjoining frame houses; and distant from these about 100 yards was a stone house, occupied by a female (a relative of Mr. Gill,) and three children. A brother of Mr. Gill after spending three or four days in Baltimore, was, while on his way home, taken suddenly ill upon the road and stopping at the house of the latter, there died of cholera; this death took place on Friday. The lady from the stone house had waited on him during his sickness, and having no one to take care of the children during her absence from home, brought them into the sick room with her. On the second day (Sunday,) herself and the three children were seized with cholera and died before night. A black woman who assisted to nurse the sick, died the next day, and finally Mr. Gill's death, on the succeeding day (Tuesday,) completed the tragedy. Of those who died, not one, except the first, had visited any place where cholera was prevailing. Mrs. Dewees, living next door, prevented her children, five in number, from having any intercousse with the sick, and she visited the infected dwelling but once; they escaped, and no other case of cholera occurred either in Govanstown or its neighborhood during the whole season, except that of a colored man who visited the city during the prevalence of the disease. The houses in which these persons died were surpassed by none in the vicinity in cleanliness." An instance quite parallel to this appears among some of those recorded by Copland, it is the following: "M. Hubenthal states that a peasant having arrived from Arkatal, on the borders of Persia, at the village of Neskutshne, to visit an uncle, was seized the night of his arrival with the disease. The persons engaged in restoring the heat of the body by frictions, &c., four in number, were attacked on the following day, and three of them died. Precautions were taken by the police to arrest the progress of the pestilence in the village and it spread no further."

In opposition to the doctrine of the contagionists, I find it reported in the British and Foreign Medico-Chirurgical Review, for July, that the Sanitary Commissioners in England, assert that there is no evidence to prove that the cholera spread by the communication of the infected with the healthy. To prove this, instances are cited by them, in which quarantines failed to arrest the progress of the disease; and also instances in which it broke out in too diffused and rapid a way to allow of the supposition of its having been communicated from man to man. They quote evidence to prove that in France and England, the cholera often originated in places to which it could not have been carried by human beings; and that it did not occur in some remarkable instances, in which large populous towns held free and daily intercourse with infected districts.

Thus, "in 1835, Marseilles suffered severely from cholera, while Lyons remained free, although nearly 10,000 inhabitants of the former city fled for safety to the latter. In 1832, Birmingham remained untouched, although at Bilston, eight miles distant, and having hourly communication with Birmingham, the disease was more severe than in any other town in England." There are recorded instances in India where parts of towns have escaped not isolated from the rest; and numerous instances where troops with the disease prevailing among them, have taken up their quarters in towns without the pestilence spreading, whilst in other instances it seems to have followed their ingress into one town on their route, and not into another.

Dr. Brown, in the article on epidemic cholera in the Cyclopedia of Practical Medicine, remarks;—"On the first appearance of the epidemic in certain places, several have been simultaneouly attacked; at Earsden Colliery, for example, thirty-two. On its first breaking out here, it manifested itself in three distinct points, between which no communication could be discovered; and the attacks in two of these points were simultaneous. It could not be traced from any source of infection to the individuals first attacked. In many instances likewise, instead of residents in the same house being successively attacked, its invasion of several has been simultaneous.

"There were feelings experienced by various persons, either otherwise in perfect health, or laboring under complaints distinct from the epidemic during the prevalence here, such as spasms, thrilling sensations of the extremities, and various affections of the nervous system, which appeared to betoken the influence of some cause more generally diffused than contagion; since many persons thus affected had not been exposed to any source of infection."

An instance quoted in the British and Foreign Medico-Chirurgical Review, as peculiarly strong against the contagion of cholera, was the following:—"In 1842, a British regiment, which had just arrived in India in rugged health, proceeded up the Ganges in two divisions. The voyage of the first division commenced on the 22d of September—on the 25th of October, the cholera, of a most malignant kind, broke out among them, and reached its height in four days; it was at the same time frightfully prevalent in the villages on the banks of the Ganges, so that in one town they found bazars deserted or depopulated by the disease, which had then raged some months. Every effort was made to pass rapidly up the river and to effect the speediest transit through the infected district; and in twelve days the disease began to decline. This change was coincident with their arrival in a country not suffering in so great a degree; and after emerging altogether from the infected district, the cholera completely left them. The important point was that a whole month afterwards, the other division left Calcutta, and proceeded in the same way up the Ganges, and the voyage of the latter was a complete counterpart of that of the one which preceded it; this division was attacked at the same point, pushed rapidly on and lost the pestilence where the first division lost it. The mortality of the disease was precisely the same, and the disease continued to prevail on the banks."—In the April number of the same periodical is the following instance taken from the Bengal Report. "Sundeep, an island in the Sunderbunds remained in 1818 and 1819, perfectly free from cholera, although the islands all round it, similar in position, cultivation and geographical features, suffered frightfully, and for long periods from the disease. This singular and unexplained exemption would doubtless have been attributed to quarantine, if this had been practised, but free and uninterrupted intercourse was carried on the whole time between Sundeep and the adjoining islands."

A parallel instance, of total exemption, was exhibited by the island of Kristofsky, which communicates by bridges with St. Petersburg, by which free and constant intercourse was maintained during the prevalence of cholera in that capital.

The Faubourg Leopoldstadt at Vienna afforded another example of a like kind. Instances of this kind are sufficiently frequent, but examples enough have been cited to illustrate this epidemic in the most important and diversified points of its history.

The British reviewer, in the July number of the journal last referred to, on the subject of contagion, espouses the negative side. He affirms, that the contagiousness of cholera "is an undecided point on which no man is warranted at present in giving a positive opinion, and he comes to the conclusion, that it is a point of little practical value whether the reproduction of the poison might occasionally occur in this way;"—"that it is a scientific curiosity; not a thing for statesmen and legislators."

He reluctantly confesses nevertheless, that the weight of the argument is on the affirmative side—that there is some real evidence to prove that it sometimes *is contagious*, and might in a very small minority of cases be reproduced by the human system"—that moreover, "it has in some cases been transported by a body of men and thus become *portable*."

Byrne complains that the non-contagionist has no theory of his own, and that his whole occupation consists in endeavoring to subvert that of the contagionist; and that had he succeeded in all his aims, he would after all have only proved to us that contagion is only one way by which cholera *does not* advance—and thus after fifteen years would but have convinced us of our ignorance, without having made one step towards enlightening it. And Kennedy observes, "that when men of talent, who have studied the subject, doubt the existence of contagion, their doubts are to be understood simply as an acknowledgment that they are unable to account for the disease on the theory of contagion, or on any other theory reconcilable to the admitted facts of its history." "And that one of two alternatives remains for our adoption, either to furnish proof that cholera is propagated through contagion, or to acknowledge that we are totally ignorant of the cause."

Can the epidemic cholera, originating in one community, under *certain circumstances*, be propagated to people in another community, by the transportation thither, of persons infected with it, or of fomites? This is a mere question of fact, to be determined on evidence alone, and when disposed of, it narrows the ground of controversy very much. My apology for having entered so much into the details I have given, has been the wish to bring in fair connexion such facts as are generally disjointed in order to sustain unfair and partial opinions. Viewing facts as they have been presented to us, I think we are bound to admit, that local circumstances may exist in many places, which though incapable of originating the epidemic cholera, may if that disease be transported into such localities, tend to propagate and to spread it, whilst we must equally believe that there may exist circumstances, under which, the disease when thus transported, is incapable of being propagated. This has been the conclusion arrived at by many able investigators.

Sydenham in the analogous progress of the Egyptian plague (in 1665,) thought that the coöperation of a peculiar atmospheric disposition, or constitution, was essential to the diffusion of that pestilence; but he thought this condition of the atmosphere inadequate to the production of that pestilence in England, without the importation by fomites, or the arrival of an infected person from an infected district." (Sect. ii., chap. ii.)*

Dr. Copland, in viewing the spreading of Asiatic cholera, goes much further;—he says, that " predisposing causes in the atmosphere may reinforce the infecting agent and assist its action;" but " although the author admits, that the pestilence is greatly aggravated by certain states of air to which the term epidemic is strictly applicable, notwithstanding our ignorance of the precise nature of these states, yet there seems no doubt that it is propagated, and prevails to a certain extent, *independently* of an epidemic concurrent influence." Kennedy does not go quite this length, as will be seen hereafter.

The question which next arises is this !—are those predisposing, or non-disposing circumstances known, which favor the epidemic propagation of this disease at one time and which prevent its propagation at another ?—is the knowledge, in what these conditions most essentially consist, ascertained ? This question has been generally answered in the affirmative and a variety of different agencies enumerated by different writers ; yet by others again, and these persons who have given the subject much attention, it has been decided in the negative. Another question, finally, may be alluded to ! does the specific virus, or cause superadded to those which are predisposing, derive its first origin from the living body only, or is it derived from sources external and foreign to the human system ?† Dr. Copland considers that the virus of cholera is a purely animal miasm and that it can derive its existence from the living body only. This view appears the most at variance with the epidemic character generally assigned to it.

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* " The contagion accompanying the disease, and the disposition of the air to promote that contagion, ought equally to be considered ; both being necessary to give the distemper full force."—(*Mead on Plague*, chap. ii., p. 184.)

† As an evidence of both the importance and difficulty of this subject, Sydenham believed that epidemic diseases arose from mineral vapors, derived from the inmost bowels of the earth.

If we agree with those, who deny to the cholera any epidemic character, and who explain its propagation upon the doctrine of contagion in its most limited sense; such facts as those noticed with respect to the island of Sundeep, Kristofsky, and the other instances last adduced, could hardly be accounted for, short of considering the inhabitants in an exempt community, which immediately adjoins and allows communication with an infected one, to be composed of those more rarely constituted individuals who are from inherent causes, not susceptible to contagion. Persons who constitute isolated and exceptional examples in one community, are, by some accidental event, assembled in numbers to form the entire population of an adjoining community. If it were possible to believe so singular an incident to be the case, we must shut our eyes to the fact, that so soon as these unsusceptible individuals from the exempt district, step within the precincts of the adjoining one, the disease attacks them as indiscriminately, if not more so, than it does the proper residents.

On the other hand, if we agree with those who advocate the belief that the disease never is contagious, we can only annul the facts first adduced, by supposing that wherever a certain number of indivdiuals in a healthy community, who have intercourse with an infected person coming from an infected district, are attacked with the disease, and none others, that this is a mere coincidence.

Again, those numerous examples where the disease has made its appearance in places so soon as it has been imported, and not before, we are obliged to consider as coincidences. But, furthermore, the remarkable fact that the disease should have appeared in one place, and extended to remote places progressively, and in no instance simultaneously, must be left unaccounted for at all.

To those who deny contagion, and attribute the propagation of the epidemic to poisonous miasma wafted on the winds, the contagionists object, that in "such case the disease could not make any sensible progress directly against the continued and violent monsoon winds, nor could villages nor tracts of land escape the disease, when all around them were suffering from it."—(*Madras Reports.*)

"The wide and uniform diffusion of cholera which we have witnessed, has taken place over countries bearing little or no resemblance to that where it originated: and their climate and seasons, especially, have been altogether dissimilar."—(*Ibid.*)

To those who *deny its contagion*, and attempt to account for its propagation by supposing it solely to attend the development in the atmosphere, of a specific poison, which has an immediate telluric origin, the contagionists object that the cholera "continued to spread among the crews of ships after they had left the ports of India." "If," say they, "the cause of the disease be connected with the soil, how does it produce its assumed effect on the waters of the ocean? Moreover, these specific telluric emanations don't take place simultaneously at different points, but are evolved coincidental with the importation of the disease."

To those who refer it to electro-aërial influence, the last objection would be equally valid.

Finally, to those who attribute the spreading of epidemic cholera to the incidental combination of the several causes usually assigned for the production of pestilence, and restrict the appearance of contagion solely to neglect of cleanliness, crowding together of the sick, and imperfect ventilation, it is only necessary to say, that the combination of so many causes coincidental with the progressive eruption of the disease, has seldom or ever attended its course ; and that numerous instances of its contagiousness have been exhibited in open, airy, and thinly-inhabited situations, and during opposite states of the atmosphere, as respects both humidity and temperature."

The circumstance either of contagion or of non-contagion, is not *commonly* regarded as essential to what is termed an epidemic disease. Smallpox, which is a disease acknowledged by all to be contagious, is only capable at disconnected periods of spreading epidemically. Yet, in proportion as the epidemic form prevails or declines, will the contagious type of the disease increase or diminish. Cholera was a disease long known in India, and is said to have prevailed epidemically at different periods, both in India and Europe, previous to its epidemic outbreak in 1817.* When the disease was not prevailing epidemically in India, it was not considered contagious—thus we are assured by Kennedy—though Copland, and some others, think the epidemic cholera to be a distinct and different disease. The Egyptian plague, however, in its sporadic form, and as it is observed each year in Egypt, is regarded, like cholera sporadica, as non-contagious. The same characteristic has been observed in dysentery.

From the different facts observed in its history, it appears that the localization of an epidemic cholera must have some intimate connexion with the hygienic condition of the place in which it can exist. What these conditions are, or from what causes they spring, it is not necessary to my purpose to hazard an opinion.

Assuming what is universally conceded, that the epidemic disease pervades the atmosphere wherever it prevails, I deduce the following conclusions, which, I think, afford an explanation of the mode of development and mode of progress of the epidemic cholera, which is reconcilable with all the facts observed in its history.

1st. In localities where epidemic cholera originates, it is produced by the combination of certain elements already existing in the atmosphere, which in their course of combination, or when combined, produce a poison, the effect of which is the cholera.

2d. These elements do exist in all other localities in the world where cholera is capable of becoming *epidemic*.

3d. Previous to the existence of epidemic cholera in all such localities, the elements necessary to form the poison, have not yet entered into the requisite combination ; but these elements may be made to enter into this combination, by the introduction among them of the same elements which have undergone or are in the process of undergoing that combination ; and the atmospheres of such localities become cholera atmospheres.

The change thus wrought is similar in its character to that illustrated in the phenomenon of fermentation, wherein we see the properties of large masses of matter changed, by the addition of another small portion of the same material undergoing that change. Therefore it may be said in general terms, that the existence of an epidemic cholera, is due in each case to a peculiar change imparted to the atmosphere of the locality where the epidemic prevails.

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* Sir John Pringle, on Diseases of the Army in the Netherlands, London, 1752, observes: "The *cholera* and dysentery, though seldom *epidemic*, yet are the frequent diseases of the moister countries."—Part I., Chap. I., p. 7.

In the spreading of an epidemic from one locality to another, this change peculiar to the atmosphere of the first place, is reproduced in the atmosphere of the new locality, not by the mere admixture or diffusion in it of the specific poison which invades it, but by the invading poison, starting in it a peculiar and kindred change, such as is illustrated by the phenomenon witnessed in the ordinary process of fermentation already alluded to. The effect of a particle of leaven introduced into a mass of dough in leavening the whole mass; or that produced upon a quantity of wort or grape-juice by the smallest addition of the same fluids in a state of fermentation, serves for exemplification.

For the development in any given place of the phenomenon designated epidemic cholera, two principle conditions are consequently necessary; one of these is a previous abnormal state of the atmosphere of such locality, which may be called a state of adaptation or susceptibility; the other one is the addition thereto of a morbific agent which is capable of setting up in it the requisite change. One of these conditions existing without the other; no epidemic cholera can prevail, and consequently out of the prescribed limits, we have seen that the disease actually may and does lose its epidemic character.

That the epidemic does not spread by the mere diffusion of the poisonous atmosphere, which must become less and less concentrated as it is extended, is shown by the numerous facts of localities in immediate proximity to the epidemic not being disturbed, whilst other places more remote are often selected for its ravages; also by its devious route, and its frequent advance in opposition to currents of wind. The fact that when transported by persons afflicted with the disease, as observed in the movement of troops, by sea or land, the cholera is incapable of setting up a change in the atmosphere of one locality so as to engender an epidemic, whilst it readily engenders that phenomenon in another place, goes to show that the previous atmospheric conditions of the two places were different.

The doctrines I have here advanced on the mode of propagation of epidemic cholera easily reconciles itself to all the diverse phenomena which has attended its progress, and can conflict with none of the facts which have been brought against other theories. In order to comprehend its erratic wanderings and its skips and strides, we must first recognise the simple fact, for which I have offered a solution, that in some conditions of the atmosphere of any place, the cholera virus, whether it emanate from a human body infected with the disease, whether it be brought in a trunk or ship containing cholera atmosphere, or comes in any other way, is capable of reproducing in the atmosphere of the place a poisonous change; whilst in another condition of the atmosphere of either the same or of a different locality, the introduction of cholera virus is quite incapable of reproducing in it such a change.

The following characteristic of an epidemic disease finds such a strict analogy in the fermentative process above contended for, that I cannot refrain from here drawing attention to it. It appears to have been generally noticed as a singular matter of fact, by persons holding different views and consequently irrespective often of any particular theories. "A great peculiarity about the choleraic virus, is, its gradual development and exhaustion. Thus it enters a place and, something in the manner of plague, attacks a few of the most predisposed individuals; then increasing, it rapidly reaches its acme, and then declines. Mr. Kennedy attributed to it a kind of monthly course; and Mr. Orton and others have fancied the varieties were dependant on lunar changes." "Dr. Lorimer adds another example to this curious peculiarity: The average duration of a severe epidemic outbreak of cholera is under four weeks, and the period of its greatest virulence is limited to about one third part of the whole time of its continuance, or about nine days, during which time nearly one half of the attacks are fatal, while during the whole period of the epidemic the deaths amount to one-third of the seizures.....The virulence of the epidemic is confined between the fourth or fifth and fifteenth day of the epidemic." (Lorimer, p. 10.) (This extract is quoted from the British and Foreign Medical Review for April.) The reviewer here remarks, "in this development and decline, cholera seems to have some singular analogies to plague and epidemic smallpox. It is this fact also which has given some countenance to the opinion before referred to, that the development of animal life comes nearest to the spread of the choleraic agent."

Dr. Handcock (Art. Epidemic, Cyclop. Prac. Med.) remarks, "we are informed by Dr. Russell, that at the beginning of an epidemic plague, the contagion is feeble," and that the contagion is nearly if not quite extinguished at the decline, both in persons and clothes, must be obvious to every unbiassed observer who considers the facts; for the disease has never ceased in any place for want of subjects to act upon.* "Dr. Russell, sums up the matter in these words, after stating that the constitution of the air is the cause which heightens or lessens the susceptibility of the contagion."—"1st. In the beginning of a pestilence the disease though less contagious, appears in its most fatal form. 2d. On its increase and height, though manifestly more infectious, the malignity of the effluvia does not seem to be exacerbated, because milder forms of the disease are then more common." Dr. Handcock, in commenting upon the observations of Dr. Russell, says,—"In considering the progress of an epidemic pestilence from one country to another, it must be viewed as a remarkable fact, that a disease which has become so mild as to lose the power of doing mischief in one place, when transferred to another should begin in the same insidious and destructive manner, and continue to rage with the same violence, and at last moderate its fury in the same way as it was observed to do in the former."

A report on plague and quarantine to the Royal Academy of Medicine, Paris, 1846, makes this phenomenon one of the first characteristics of an epidemic disease. "Epidemic diseases present characters which distinguish them from diseases non-epidemic.—1st. They have in their progress a special course. They have generally three periods: period of commencement, persistence, and decline or termination."

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* Though in the month of September (says Maitland,) death rode triumphant, and part of October proved equally fatal: yet during the two succeeding months, the town was repeopled with as much rapidity as it had been deserted.—(*Plague of London*, 1665.—*Adams on Epidemic, p.* 5.)

When we compare this course of an epidemic with the fermenting process, through like periods of increase, maturation, and decline, we see how aptly the one illustrates the other. The fatality which attends the sickness of those few who are seized at its commencement, would be expected where the atmospheric cause is on the increase, and the diminishing severity of the type as the maximum point is past, would harmonize with its returning salubrity.

What this condition or these conditions of the atmosphere may be, which renders it capable of taking on the epidemic change may be partially determined by contrasting the condition of such places as the epidemic selects for its ravages, with the relative severity or mildness of type the disease therein assumes, the duration of its period of incubation in such place from the time the pestilence may have been first introduced until it has attained its height, and the duration of its visit. The more closely the geographical and meteorological conditions of any region approximates to those of the country where the epidemic originated, the more readily we may suppose the propagation of the pestilence will be effected therein.

Kennedy says that Jessore, where it commenced its ravages in 1817, and prevailed with intense malignancy, is "a crowded, dirty, ill-ventilated place, surrounded by a thick jungle and exposed during the rains to the effluvia of an immense quantity of stagnant water. The district of which it is the capital, in its southern quarter is composed of the 'Sunderbunds,' a name given to numerous low, marshy islands contained in the delta of the Ganges." The same author observes, that "in a village supplied with running water, and surrounded by grounds which are open and favorable to free ventilation, the type will be less dangerous than in a town crowded with inhabitants, hemmed in by jungle and exposed to the exhalations of stagnant water. The type prevalent in the village, indeed may be decidedly non-contagious, while that in the town—the disease being the same in kind, but different in degree—may assume the most virulent and contagious form."

The report of the Sanitary Commissioners in England states, "that the mode of its epidemic invasion in the various cities of Europe has been every where strikingly uniform. It has always made its first outbreak in the lowest and dampest portions of the city attacked. They remark that it is the combination of humidity with impurity of the atmosphere, which so powerfully predisposes to cholera;"—that "cleanliness however seems to be capable of controlling the effect of mere humidity, as was exemplified in Holland, where they were comparatively exempt from the disease."

In the valley of the Mississippi the epidemic spread with great readiness and severity, whilst in New-England it made but little or no progress. "From Jessore it is said to have extended to the adjacent villages and to the whole province of Bengal in a progressive manner;" while "in the upper provinces of Hindostan, its visitations were more irregular, and it often happened that a village situated on the line of route apparently taken by the malady, would remain untouched." This exemption often proved, however, of very uncertain duration the epidemic ultimately prevailing. The degree of time the propagation of the pestilence is resisted in different districts traversed by it, is often very variable. For example, "when the cholera raged near the city of Hyderbad, many days elapsed before it reached the cantonment—a distance of only five miles. When it has broken out in a place, as in all other epidemics, individuals equally exposed to it resist its influence for different lengths of time. When the pestilence broke out in Calcutta, "it committed great havoc among the natives during the first days of September, but the Europeans where not attacked until the fifth of the month." Kennedy, in alluding to this circumstance, observes; "why the disease should reach the Europeans then and not before cannot be explained on any meteorological observation made at the time. The fluctuations of the barometer and thermometer were exceedingly small, and the other atmospheric phenomena were regular."

To originate the epidemic it appears necessary that a number of causes should conspire, which after it is fairly started are not all necessary for its further propagation, (as obtains in fermentation)—thus other predisposing causes being equal, a difference in the bodily condition of the inhabitants of one district may turn the scale against it, and vice versa. We might otherwise ask, why the pestilence should have originated and still maintain itself in the Delta of the Ganges and not in that of the Mississippi, where the ordinary meteorological influences are often so similar: but mark the difference in the bodily condition of their respective inhabitants. Kennedy, in speaking of Calcutta, where the condition of the people and atmosphere was very much the same as at Jessore, says,—"to convey an idea of the complicated wretchedness of the lower classes of Hindoos and Musselmans of this period, it will be necessary to speak of their habits and places of abode." "The native town of Calcutta is chiefly composed of miserable lanes, narrow, dirty, and unpaved; and the majority of the dwellings are low huts, with side walls built of mud, mats, and bamboos, and covered with small tiles. Amongst the swarming population of these filthy receptacles, in which all descriptions of disgusting animal and vegetable odors abound, the distemper ran a long and wide career of destruction. Barely existing on a meagre diet of bad rice, the poor workmen, who had been abroad all day pursuing their laborious avocations in the sun, returned to their hovels in the most fitting state of body to contract the disease." The condition of the inhabitants, he says, in some of the adjacent towns, was indeed hardly to be imagined. "These villages are made up of mud or straw huts, which are individually from six to twelve feet square, and so huddled together that there is scarcely room to pass between. In each of these habitations a whole family resides, and, not unfrequently cows and other domestic animals are added to the proper inmates. These dependencies are, moreover, intersected by pools, broad ditches, and channels, which in the rainy season become the reservoirs of foul water and corrupt weeds."

Mere bodily condition, however potently it may assist, is not a sufficient cause of itself to originate the epidemic, since we have the almost parallel condition in this respect of the people of Ireland, where the epidemic has appeared only in the regular course of its progress.

In order to decide upon the contagion or the non-contagion of a disease, the exact application of the term contagion should be defined ; if it be applied only to the mere contact of a living animal, laboring under a certain train of symptoms, with one unaffected therewith, it is vague, inaccurate, and consequently unsatisfactory. For the mere shaking hands with a syphilitic or a smallpox patient, other modes of contamination being prevented, would probably equally fail to propagate the disease.

We must suppose the *virus* which causes the peculiar train of phenomena in the system of the sick person to be brought into contact with a portion of the system of the other person, which portion is in a condition to become infected. For this purpose, taking smallpox as an example, it is known to be quite unnecessary that the virus should be brought in contact only through the intervention of the living animal tissue. It is equally well known that animal heat, though possibly it may be constantly necessary for maintaining the integrity or activity of some poisons, is not so for the virus of smallpox, and any other diseases which may exist under great variations of temperature.

Any specified disease, therefore, which may be propagated to the human system through the contact of a morbific agent, be the same existing in the living animal tissue, in clothing, or in the atmosphere, must equally imply contagion. This leads to the consideration, as a next step, of the nature of the phenomenon to which the terms contagion and infection have been applied ; and, finally, to the conditions which characterize the strictly endemic from the epidemic form in which many of these diseases are known to prevail.

Under the same circumstances, when too old, contagious materials, like leaven or yeast, appear to lose their power of exciting action.

In the application of the virus of smallpox to the human body, we witness the phenomenon of a minute quantity of material possessing the peculiar property of setting up in that body an action which results in the reproduction, in large quantities, of new material, endowed with precisely the same properties as the original matter. The original mite of material may be dissipated, and now no longer have existence, but its property has been communicated ; the matter which we now have is not this original mite diffused through the system, but it is a fresh additional supply, in a similar train of action, and endowed with similar properties. That it exists in almost unlimited quantities, has been manufactured from elements already existing in our system, and consequently that materials existed in the human system capable of being so related as to produce smallpox virus in large quantities, we have here the direct evidence of our senses.*

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* Rhazes, on the causes of smallpox, observes: " Now, the smallpox arises when the blood putrefies and ferments, and the fermenting particles are thrown out of it ; the blood of children, like to new wine, being changed to that of young men, which is as wine perfectly ripened. And this fermentation and ebullition is the disease."—***Mead's Translation***, Chap. II.

Cullen and Walker compare the action of the smallpox virus, when introduced into the blood, in a very clear and explicit manner, to that of a ferment; which produces (in the language of the latter) an " assimilating fermentation."—Vide ***First Lines, Treatise on Smallpox.***

Mr. Cruikshank, in a more general reference to the same idea, says: " Fermenta-

We have here, then, the metamorphosis of a material produced by the transposition of its elements through the agency of an external disturbing force. The analogy between this and the effect of a particle of leaven upon a piece of dough is sufficiently apparent.*

Owing to the various processes of decomposition and recomposition, constantly going on upon the surface of the earth, due to the action of chemical laws, the atmospheric fluid in which we are immersed, independent of its own proper constituents, becomes, near the earth, more or less charged with elements in a transitory state of combination, and forming materials, the properties of which are modified according to local circumstances. The virus of smallpox often finds in the atmosphere the same constituent elements of which it itself is composed, and only differing in property in the fact of being differently related or combined. The affinities controlling these relations may be comparatively so weak as to be easily disturbed by its presence, and these constituents are then made to assume new relations, identical with those of the disturbing agent—*i. e., smallpox.* Reproduction consequently ensues just as it did under like circumstances in the human system ; and any human being within the sphere of such metamorphosis in the atmosphere, be its limits extended or contracted, is liable, through this general mode of contact, to have communicated to his system the same process as would be engendered by any other mode of contact—the requisite conditions of the body must exist, of course, equally in both cases. Other conditions, it may here be observed, may exist in the human system which seldom or never exist in the atmosphere ; and thus the former may be subject to a train of distinct phenomena, capable of being communicated only by individual contact : such as the diseases called syphilis, gonorrhœa, porrigo, etc., etc. Epidemic agents differ here simply in not being restricted in their field of operation to the human system alone, but in finding their elements of increase and reproduction in the atmosphere as well.

In smallpox, wherever the pestilential condition of the atmosphere is restricted to a very limited space, it is usually termed endemic : within the precincts of a single room it might be so called, although, substantially, the same causes may be in operation as when the disease is extended in its area over a region of country. Yet, supposing the atmosphere of that room to have been very pure, and that a case of smallpox is introduced into it—without considering the partial decomposition of that atmosphere in the process of respiration, and its consequent change—it may, through the mere recurring emanations from the body of the patient, become so charged with the virus, as to propagate the disease to the system of a new individual immersed in it. Here the relation of the

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tion has been chiefly observed in dead matter, and is commonly accompanied with ebullition and extrication of air ; but fermentation may also take place, and I believe certainly does take place in *living matter.* Ebullition, or any evident motion, is not necessary to constitute fermentation ; after wine has undergone what is called its open fermentation, it continues, after it is bottled, to go through its secret fermentation, where no motion is evident, and every body knows requires time to ripen."—*Anatomy of Absorbing Vessels*, p. 111, 2d London edition, 1790. See on this point, *Liebig's Animal Chemistry*, Part II., Sec. 13, p. 114.

* See Liebig's Animal Chemistry, Sec. 7, Part II.

virus to the atmosphere would be that of mere mixture, and its production be derived only from the body of the patient. Whether, under such circumstances, such limited relations between the atmosphere and the virus can be maintained or not, one fact is well known, that in the open air, where the latter can find no conditions for its increase, it is speedily dissipated; and this circumstance alone may serve to distinguish the strictly *endemic* from the *epidemic* form of a disease.

Supposing, however, that the air of that space or room, contained already the same elements, but these in such opposite relations as to resist, to a certain degree, any disturbance of their existing affinities, the special chemical change might, under such circumstances, finally be produced, and the disease consequently be propagated in the surrounding atmosphere as a real epidemic; but this disturbance of previous relations would, in an open space, extend just to that range where the equilibrium could be restored by opposing forces, and then cease.

To escape an epidemic, a change of place is often successfully resorted to, and for mere hygienic and curative purposes, a change of air is constantly associated in the mind with change of place; and this, irrespective of any of the ordinary changes in the air induced by the weather.

It may be objected that chemical analysis of the air, in periods of pestilence and periods of health, has failed to determine any departure from its ordinary constitution. Admitting such chemical analysis to have been made as well as the present state of chemistry can allow, yet organic chemistry shows us the frequent phenomenon, termed isomerism, wherein materials, constituted precisely of the same elements in like proportions, exhibit very different properties. Mineral chemistry may be considered likewise to afford a very remarkable instance in the three modifications of phosphoric acid; these with properties entirely dissimilar, only differ in different equivalents of basic water.

Antiseptic agents, which are used to arrest or retard the putrefactive fermentation, disinfecting agents employed to destroy infection in the atmosphere, specific medicines employed to disinfect the human system from disease, (such as mercury in venereal,) whether internally or externally employed, are probably all allied, if not identical, in their mode of operation. I need not dwell, however, upon speculations which open so wide a field: yet it is one which I am satisfied that organic chemistry can alone enable the physician to explore.

Both endemic and epidemic diseases, irrespective of the property of contagion, are referred now as in former ages, to the inhalation of an impure atmosphere, in which some deleterious agent is assumed to exist. "For," (in the words of an old writer,) "to other causes we are not all exposed together, nor do we come in contact with them for the whole day; but the ambient air is diffused around all, and is inhaled by respiration." (*Paulus Ægineta.*)

The question here suggests itself—in what way does the materies morbi, received by inhalation, operate upon the system to produce disease? Agreeably to the idea of its chemical action we would not look to see it exhibiting its effect upon the nervous system before it has established some injurious alteration in the blood. The ground for this old opinion is strengthened when we glance at the conditions which favor the chemical action of a virus thus encountering us. 1st. We know that the "sum of the superfices of the walls of all the capillaries of the lungs" must establish an immense surface for the contact of the poison; then, according to Menzies, it is estimated that each person averages 28,800 *inspirations* in 24 hours. After a natural *expiration* there still remains in the lungs about 350 cubic inches. The medium quantity of air which enters into the lungs at each *inspiration* is about 300 cubic inches.* Now it must be recollected that the inspired air, by the time it arrives at the pulmonary cells becomes both warm and humid; that the portion of air expired is not identically that which has just been previously inspired, but is principally that vitiated element which the lungs contained before the last inspiration: for the retained air having undergone a sort of pulmonary digestion, by which it is deprived of some constituents and acquires new ones, we may justly conclude that it loses its affinities for the blood, and is expelled more readily than the fresh supply. The materies morbi must, therefore, in the process of respiration, come freely in contact, often for long periods, with this immense surface, during which time the blood of the whole system is subject to its presence. Whether we suppose the poisonous atoms to enter the circulation and be absorbed, or to be otherwise disposed of, they must be here placed in the most favorable position for disturbing the previous affinities of certain elements in our system, and inducing them to assume new chemical relations of a nature incompatible with a state of health.† The symptoms of disease which ensue is merely an evidence that this change of relations which constitutes the actual disease is taking place. If free communication with the sick under these circumstances is productive of no like phenomena in us, the disease is called non-contagious, but if while these new relations are in progress, communication with the sick or materials connected with them can propagate the same phenomena to others, we are forced to recognise the production of a specific ferment.

The idea that putrefaction and fermentation of the fluids in the living body characterized certain fevers, such as typhus and smallpox, is an ancient one, and appears to have been entertained both by the Arabians and Hindoos, but the idea that putrid or contagious particles *floating* in the air, may propagate this phenomenon to the living animal fluids, by acting as a ferment, I first see suggested by Mead and Sir John Pringle. In Mead's work on Plague, (chap. ii., p. 184.) the following passage occurs: "The pestiferous atoms, impregnating the air, when taken into the body of a sound person, will act like a ferment upon the fluids." And Sir John Pringle, in a letter to Dr. Mead, first published in 1750, says, "the malignant or pestilential fevers are various, according to the virulence of the miasma or putrid *ferment* received into the blood."—*Pringle on Diseases of the Army.**

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* Sir Humphrey Davy—see Magendie's Physiology.

† If we introduce into the jugular vein of a dog a few drops of water which has remained a little time in contact with animal substances in a state of putrefaction, in the course of an hour after its introduction the animal will be depressed, and lie down. Soon he will be attacked with an ardent fever; will vomit black and fetid matter; his alvine evacuations will be similar; the blood will have lost its power of coagulation, will be extravasated into the tissues, and death will soon follow.

These phenomena, which are very analogous to certain diseases of the human subject, as the black vomit in yellow fever, etc., appear to originate in an alteration in the composition of the blood. I think even that I have discovered that the dimensions of the globules diminish in proportion as these symptoms become developed. This is in harmony with the passage of the blood through the walls of the small vessels, and the hemorrhages which are its effect." . . . . "No doubt, then, a certain composition of the blood is one of the conditions important to the exercise of the different functions."—*Magendie.*

When we consider that a contagious disease usually requires a period of incubation, after exposure to an exciting cause, and that a reproduction of the specific poison is its most uniform operation, the belief, that the virus acted primarily upon the blood as a ferment and assimilated certain components of that fluid to itself, is more consonant with reason and analogy.

The same idea appears to have been adopted by M. Pariset, and embodied in the report of a committee on Plague, to the Royal Academy of Medicine, Paris, so late as 1846. M. Pariset supposes that the products of putrid decomposition, such as "vapors (not gases) containing organic condensible molecules," while maintaining their peculiar organization, "can serve as a ferment, and act upon living beings to disorganize them." That when the air is in motion the "germs of the plague being dispersed by the winds, are less active," etc.—(*Brit. and For. Med. Rev., July,* 1847.)

The theory carried thus far, however, can only apply, as I have shown, to the phenomena of contagion, when endemic and inseparable from an assumed local source, from whence the materies morbi, suspended in the air, is being supplied. Its relations to the atmosphere would be that of a mere mixture, and it would not diffuse itself in opposition to currents of wind.† The wind indeed would tend to disperse it, or waft it over a contiguous locality, where it might be either too feeble to act, or be destroyed by its constituent elements assuming new relations under the influence of opposing forces. (See page 201.)‡

This explanation, therefore, is yet not sufficiently complete to account for either the spread of an epidemic, or the peculiar course it appears to run in each new locality it visits. The late distinguished Dr. David Hosack of this city, appears to have advocated strongly the theory of specific ferments, and he is the first and only medical writer, I believe, who advanced this theory in the way necessary to meet these objections. Dr. Hosack most distinctly ascribes the diffusion of an epidemic, to the propagation of a specific virus by an assimilating fermentation, from atom to atom, in the atmosphere itself.*

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* Dr. Mead considered that these pestiferous atoms were received into the body "by the lungs and by the skin, but chiefly by the former:" and Dr. Huxham thought they were received into the stomach by becoming entangled with the saliva and swallowed.

† The diffusion of a poisonous gas, in virtue of the diffusive power investigated by Graham, though it might prevail against winds, does not sufficiently correspond to the spread of an epidemic disease. As the tendency of a gas which is supposed only thus to act, is to diffuse itself equably, its virulence would constantly diminish unless it was capable of promoting, in the nature of a ferment, a reproduction; it would not concentrate upon particular localities and leave an adjoining one untouched; nor be so dependent for its introduction into remote places, upon human intercourse, as cholera and other forms of pestilence have been. A gas escaping from the earth in a particular locality, might act, as a katalytic agent, to effect the primary change upon its atmosphere, which change may afterwards propagate itself in the nature of a ferment.

‡ *Liebig on Chemical Affinity,* part iii., p. 196.

The two following paragraphs, in the summing up of his remarks, exhibit sufficiently Dr. Hosack's views on this head.

"From these facts I have been led to conclude: 1st. That an impure atmosphere is indispensably necessary to multiply and extend the specific poison constituting plague, dysentery, typhus and yellow fever. . . . . 4th. That the impurities of the atmosphere are fermentable materials, to be called into action by the specific ferment of those diseases, aided by heat, moisture, and a calm state of the atmosphere; and that as far as such atmosphere extends, and the circumstances favorable to such fermentative or assimilating process continue, so far those diseases become epidemic, but no further."

Dr. Hosack here refers to Lucretius as expressing the same idea in his poetical description of the plague recorded by Thucydides. "The same idea of an assimilating process appears to be expressed by Lucretius—when speaking of the contagiousness of the plague, he observes:" Here the original lines are introduced and the following translation by Dr. Good.

> "But when the heaven of poisonous power to us,
> First moves remote, its hostile *affluence* creeps
> Slow, like a mist or vapor; all around
> Transforming as it passes, till at length,
> Reached our own region, it the total scene
> Taints, and *assimilates*, and loads with death."
> (*On the Nature of Things.*)

Before concluding this part of my subject I would here suggest an arrangement of diseases with respect to this phenomenon of contagion, under the three following heads;—for which heading, I adopt a nomenclature in accordance with the views I have endeavored to set forth.

Diseases when propagated by the direct contact of one person with another, or by the contact with fomites, may be called (personally, or) *fomitescently* contagious; when they are propagated through the atmosphere, by contact with a virus *mixed* in that atmosphere, but not reproduced in it—in other words, by what is frequently contra-distinguished by the term infection—they may be called *endemically* contagious; and when propagated through the atmosphere, by an actual reproduction in that atmosphere, they may be called *epidemically* contagious. I think that one of the advantages afforded by such a classification would be, that in diseases contracted under any of these circumstances, the actual contact with a *materies morbi* is recognised throughout, in a definite and precise manner, whilst the more immediate source of the poison, or contagion, is designated.

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* Observations on the laws which govern the communication of contagious diseases;—first communicated in a letter to Dr. Chisholm, July 16th, 1808.—See *Hosack's Medical Essays.*

Again, instead of using the appellations "*immediate contagion,*" and "*mediate contagion,*" or *contactual* contagion and *remote* contagion, as direct contact with a materies morbi must occur in all cases; the definite term contagion, with its simple and precise meaning, is only associated with a term which would designate the precise condition under which we suppose a disease to be contracted.

By this arrangement we avoid any ambiguity, and allow diseases to arrange themselves naturally under one, or more, of the three following heads, each of which will indicate but a phasis of the same phenomenon—thus:

FOMITESCENT CONTAGION.	ENDEMIAL CONTAGION.	EPIDEMIAL CONTAGION.
*Plague.	Plague.	Plague.
*Smallpox.	Smallpox.	Smallpox.
*Chickenpox.	Chickenpox.	Chickenpox.
Measles.	Measles.	Measles.
Scarlet fever.	Scarlet fever.	Scarlet fever.
Yellow fever.	Yellow fever.	Yellow fever.
Typhus fever.	Typhus fever.	Typhus fever.
Cholera, etc.	Cholera, etc.	Cholera, etc.
* * *	* * *	* * *
Elephantiasis Arab.	Elephantiasis Arab.†	————
Sivens.	Sivens.	————
*Yaws.	————	————
*Cowpox.	————	————
*Syphilis, etc.	————	————

I employ the term *fomitescent* contagion in preference to and to the exclusion of the term *personal* contagion inasmuch as the word fomites has a more general application, having been so generally used to designate such matters as goods, clothing, feathers, furniture and the like, which have become impregnated with a poison from the bodies of the sick. Animal bodies, either living or dead, for all practical purposes may therefore be included under the same head with these—with which indeed they are commonly and necessarily associated. There is no reason why the coëxistence of vitality, in the same material, should constitute a serious objection to a term thus employed;—whereas the term personal contagion or communicability could not be so generally applicable and thus only involves a useless multiplication of terms.

The use of the 1st expression, (*Fomitescent contagion*) is made necessary in order to *include* those instances of contagion where a disease can be derived solely by contact with a materies morbi, before the latter is disengaged from some palpable animate or inanimate source. (See page 200.) It includes accordingly both syphilis and smallpox, whereas *endemial* contagion includes only the latter.

2d. *Endemial Contagion* is used to indicate a contagion which is derived from contact with a virus which is diffused or suspended in the atmosphere, as a *mixture*, after its disengagement from some other generating source.

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† Aretæus says, that "it is not less dangerous to converse and live with persons affected with this distemper, elephantiasis, than with those infected with the plague; because the contagion is communicated by the inspired air."—(*De Causis ditur. Morb., etc.*, lib. ii., cap. 13.)

3d. *Epidemial Contagion,* indicates that mode of contagion which is derived from contact with a specific virus, which, no matter whence its origin or source, is capable of reproducing itself in the atmosphere, by affecting a change of relation of certain elements already existing therein. (See pp. 194, 200.)

In this classification, plague, smallpox, and the other diseases marked with a star (*), are all alleged to have been successfully communicated by inoculation on the skin. Plague, which is the first on the list, I have marked thus, because we have it from reliable authorities, that it is a disease transmissible from individual to individual in all the ascertained modes in which syphilis or smallpox are thus communicable, such as by inoculation from the matter of pest buboes, contact with fomites, &c., &c. There is sufficient evidence to believe, that this property is modified in extent by the combined operation of occult causes in the air, and in the system of the individual; to this rule the plague is only subjected in common with smallpox, the cowpox, and I suspect with every other disease, including syphilis itself, which have exhibited the phenomenon of contagion. Taking smallpox, however, as an acknowledged type for all modes of contagion—what are the facts? We find that the virus of smallpox at one time spreads its pernicious influence as an epidemic over regions with such virulence as to depopulate them and to set quarantines at defiance; at another time its influence is restricted to a very narrow space, insomuch that Dr. Haygarth considered that the *infectious distance* in the open air, and in moderate cases of smallpox, could not exceed *half a yard;* and that in the worst cases it would extend but *a few yards.* At another time it comes like syphilis, to be barely and with difficulty inoculable; and at another time it has proved to be wholly inert and capable of exhibiting no contagious properties whatever. These instances are not cited as only applying to mere isolated and individual examples of which many are recorded, (vide *Walker, etc.,*) but as being sometimes exhibited on the largest scale, of which the following example is pretty conclusive.—I quote it from the *Brit. & For. Med. Chir. Rev. for April last.*

"Dr. Norris states, that during the prevalence of the Harmattan on the African coast, smallpox is *not contagious.*" Dr. Dobson, in whose paper Dr. Norris's observations are recorded, remarks, that in the year 1770 there were on board the Unity at Uhydar, more than 300 slaves; the smallpox broke out among them, and it was determined to inoculate. Those who were inoculated before the Harmattan came on, got through very well. About 70 were inoculated a day or two after the Harmattan set in, but not one had either sickness or eruption." The ship, he states, became entirely clear of the disorder; but "after a few weeks the disease began to make its appearance again, and 50 of these 70 were inoculated the second time, the others having caught the disease in the natural way." Dr. Copland notices the same fact in relation to this disease. "It has also been observed that the virus of cowpox loses its activity in particular climates of India. And this is not owing to modifications produced by heat in the dried virus, because it is propagated with difficulty, even when one case has accidentally succeeded; and, in addition, virus similar to that which proves unsuccessful during one season, will succeed in another." (Vide *Brit. & For. Med. Chir. Rev.*, p. 318.)*

The plague, too, in like manner is, according to Alpinus, checked and wholly extinguished in certain parts of Africa by the Harmattan winds. (See *Cyclop. Pract. Med., Art. Contag., p.* 501.) This Dr. Brown supposes to be owing to the high temperature of such countries; but according to Dr. Norris, "the Harmattan is an exceedingly dry, but not a hot wind; the thermometer during its prevalence seldom averaging more than 80° at mid-day." Dr. Russell, who is quoted as high authority by all modern writers upon the plague, though he maintains it to be actively contagious, and supports his assertions by the most convincing proofs, affirms that experience clearly evinced it to be a fact, that in certain states of the air a communication with the infected was attended with no material consequences.

This author maintained that no combination of indigenous circumstances could give rise to the plague in Syria, that it was of foreign origin, and in all its epidemic invasions the result of importation, yet he tells us that its returns at Aleppo happened at irregular periods, the intervals being of considerable but unequal length, and commerce with Egypt, with Constantinople, and Smyrna remaining the while uninterrupted. Furthermore he states, "that the progress of plague at Aleppo was exceedingly restrained in 1760; it was much more vigorous in 1761; it raged with great fatality in 1762, and in this year was finally extinguished, though there was no appreciable difference in the state of the seasons, in the respective years to explain the varying diffusion of the disease or its ultimate extinction."—*Cyclop. of Pract. Med., Art. Plague and Epidemic.*

It is quite unnecessary for me to cite here any further instances of this kind. All the facts in the history of pestilence which have been brought forward by the varied observation of writers on the subject, however different their theories, appear to substantiate the belief that a specific contagion depends for its development and capacity to be propagated, upon the condition of the atmosphere into which it is introduced. The history of measles, scarlet fever, yellow fever and cholera, in their epidemic progress, present many features analagous to those exhibited in the history of plague and smallpox, of which I think the most skeptical will be satisfied who chooses to investigate carefully this subject. He will find the history of one kind of epidemic pestilence to be, in all important features, that of another, and the mere extension or abridgment of the same phenomena.

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* On the converse, Dr. Adams, in his commentaries on Paulus Ægineta says: "There is a curious passage in the work of the orator Isocrates, which shows that consumption was reckoned contagious in his days."

According to the same authority, Galen says, it is dangerous to associate with persons laboring under consumption, and in a word with all those having a putrid respiration of such a nature as to render the houses in which they lie fetid. (De Diff. Febr. l. 3.)

Rhazes mentions as diseases which are transmitted from one person to another: lepra, itch, *consumption* and pestilential fevers, and sometimes ophthalmia and malignant pustules (smallpox). These diseases, he says, prove infectious, when one is shut up in a narrow house along with those laboring under them or when one sits in the wind blowing from them. Fracastorius, likewise, considers consumption to be contagious.—(*De Morb. Contagiosis*, lib. ii., cap. 9.)

Note.—The introduction of cholera at quarantine in December last, having brought up and excited much discussion as to its contagious or non-contagious character, I was induced then to write out and communicate the views set forth in the preceding pages. Having expressed these as the result of my own convictions, without allusion to the similar opinions of Dr. Hosack and others, which I have quoted in this article ; I have only to say, that I had not then the good fortune to be acquainted with the fact, that I was advancing doctrines which had been previously advocated. I have, however, endeavored, in referring to these high authorities, to do them justice, by quoting their opinions in their own language. My views have been grounded upon the belief that contagion was dependent upon purely chemical laws, through the operation of which I believe that phenomenon to be engendered, propagated and destroyed. These were submitted, in their present form together with the nomenclature defining the three phases which characterize its exhibition, to a few members of the profession whose more enlightened knowledge of chemistry rendered their criticisms desirable, and I feel it therefore the more necessary to make this explanation for having omitted to notice to them the opinions of predecessors in the same path of investigation.

Art. VII.—*On Inflammation and its Consequences.* By J. B. Pigné, M. D., Late Curator of the Dupuytren Museum. Ex-Vice-President of the Anatomical Society, Professor of Pathological Anatomy, etc. etc. Translated from original manuscript, by L. A. Sayre, M. D.

It does not enter into the plan we have prescribed to ourselves, to describe the influence that the inflammation of a part has upon the rest of the economy. A journal is not a book, and should only contain ideas which are little known ; thus before examining the results of inflammation, we shall summarily examine its *mode of development* and its *mode of invasion.*

If we examine facts, we shall certainly find that the transmitted inflammations of an organ, are less severe than the spontaneous inflammations. It is rare that a pneumonia, a pleurisy, a meningitis, or even a peritonitis, resulting from external violence, extends beyond certain limits. It is circumscribed almost always around the lesion, and is generally cured. This is so, undoubtedly, because the transmitted inflammation is altogether local ; whilst that which is spontaneous depends upon a cause which has exercised its influence over the whole economy. This general cause cannot even have the same result upon all individuals placed in the same condition ; for it is incontestable that to contract an inflammation, there must be a certain *power of reception.* Now, this power does not exist, generally, in those persons who accidentally receive wounds, and that is probably the reason why, with them, the inflammation is limited, and is so readily cured. Indeed, we may say, in a general manner, that the power of inflammatory reception is greater in those individuals where the sanguine activity is greater, and weaker in those where the nervous system predominates. Spontaneous inflammation can attack at once the whole extent of an organ, or show itself in a single point ; in this last case, it seems to have points of predilection. It is thus that in meningitis it commences in the part which covers the convex surface of the cerebral hemispheres, and more often in the front part than the back; pneumonia, generally, shows itself at the centre of the lung in the adult, at the summit in the old; peritonitis in the umbilical region; hepatitis in the right lobe; orchitis in the epididymus; cystitis in the neck of the bladder; nephritis in the tubulous substance; enteritis in the second half of the intestinal tube, (excepting in special inflammations,) etc. Most generally it is limited to the organ which has been its primitive seat; and at other times it extends gradually to the neighboring organs. This propagation of inflammation is controlled by certain laws: thus, in the membranous appendages it is developed by following the surfaces and avoiding the deep parts and neighboring organs; pleurisy does not engender pneumonia, (in peripneumony it is pneumonia which is primitive;) peritonitis never gives place to enteritis; pericarditis is not complicated with carditis; the inflammation of the intestinal mucous membrane does not affect the muscular; in the parenchyma of organs, on the contrary, the extension of the inflammation progresses according to the thickness of the organ. This difference appears to us to depend essentially on the presence of the cellular tissue, which may be considered almost as the only seat of the inflammation, and sometimes as the *conductor* of this affection. Thus, whenever the cellular tissue is fatty, the inflammation increases with rapidity, and extends as far as the fatty tissue; the affection increases with less rapidity when it meets in its passage a cellular tissue loose but not fatty. It also respects, up to a certain point and during a certain time, thick cellular tissue, not fatty, such as we find in the mucous, the serous tissues, etc. We may, then, say with assurance, that inflammation increases in all the organs, whenever it meets in them a cellular tissue which is fatty, and that it changes direction whenever it meets coatings of the cellular tissue which are thick and hard. We shall, at a later occasion, draw practical consequences from this last observation.

Now, we say that all organs are susceptible of inflammation, but there are some that are more susceptible than others; if we would form a scale of the organs according to their power of inflammatory reception, we should class them in the following order:—1st. The cellular tissue. 2d. The serous tissue. 3d. The mucous tissue. 4th. The synovial tissue. 5th. The glandular tissue. 6th. The arterial tissue. 7th. The venous tissue. 8th. The bony tissue. 9th. The muscular tissue of vegetative life. 10th. The muscular tissue of relative life, etc., etc. It must not be forgotten that we speak here only of the *power of inflammatory reception,* for me must, at another time, form a scale for the organs, according to their *destructibility* under the influence of pus.

THE RESULTS OF INFLAMMATION.

We admit but two morbid products as the result of inflammation—which are *pseudo-membranes* and *pus.* Of these two products, one is eminently creative or generative; the other eminently destructive. Wherever one of these two products exists, there has been inflammation, there is even more. We should say that from the moment an inflammation exists, *the elements of these two products* are necessarily deposited in the organ affected. We shall take occasion to explain ourselves upon this proposition; gangrene has been considered as a result of inflammation; this is a very great error; it is the result of the obliteration or destruction of the nutritive vessels, but not a direct result of inflammation. For there are a number of gangrenes which are all, without exception, the result of a defect of local nutrition, whether there has been inflammation or not. Cancer has also been ranked as amongst the results of inflammation; this is one of the errors which I shall ask permission to combat in a special article, which I shall communicate in a short time.

To return, there are but two direct results of inflammation; that is to say, pseudo-membranes and pus.

As soon as a spontaneous inflammation occurs in an organ, and a solution of continuity takes place, consequently before the development of a transmitted inflammation, an exudation is made in the part. This exudation is of a serous nature, it proceeds from the blood; in the first species of inflammation it appears by exudation from the dilated pores of the arterial capillaries filled with blood; in spontaneous inflammation, it escapes soon after the lesion by the arterial capillaries, and which do not yet contain red blood, but a little later when this inflammation is developed, the capillary vessels are obstructed, and then the serous effusion is made as in spontaneous inflammation, by exudation.

This liquid, which is exuded, contains the materials of the pseudo-membranes and those of pus; following the march which the inflammation takes, these materials give place to pseudo-membranous and purulent products, or are reäbsorbed before acquiring any organization. According to the intensity of the inflammation, the organization will bear but a single product; in pseudo-membranes, in the reunion by the first intention and in the formation of secondary tumors; in the purulent alone, in diffuse phlegmons, in all these cases, that which is not developed is generally reäbsorbed; sometimes, however, it remains, appearing like the other, but never combining with it. In other cases, when the labor bears simultaneously upon the two products, as in cases of circumscribed abscesses, suppurating wounds, etc., the pseudo-membranous product constantly and continually separates the pus from the parts which form it.

In the logical order of ideas, we must first study the pseudo-membranes, for the manner in which we consider this product, will conduct us to the knowledge, or rather to the explanation of several interesting facts, which we shall now mention in the study of

PSEUDO-MEMBRANOUS PRODUCTS.

First Period.—Soft State of the Pseudo-membranes.

As soon as an inflammation affects any organ whatever, there is constantly in the part affected, or at its surface, provided this last participates in the inflammation, a plastic, coagulable exudation, more or less abundant, according to the texture of the organ and the nature of the inflammation.

As soon as a solution of continuity has been made in any tissue, in an individual in good health, the surface of the wound is covered in a few hours, and often in some minutes, with a coating of this plastic matter. In this case, exudation precedes inflammation. If the blood is sufficiently abundant to be carried off, the wound will suppurate; if the blood is not abundant, the wound will heal by the first intention.

This plastic coagulable substance constitutes the first and indispensable elements of the pseudo-membrane.

In the first hours of its deposition, this substance is perfectly transparent; but little by little it becomes cloudy, slightly opaque, and at the end of twenty-four hours it is whitish, and, in the serous membranes, slightly inclined to citron. Nevertheless, with sanguine and plethoric people, when the inflammation of the serous membranes is very intense, this plastic covering presents a slight rose tint. If, with this deposit, a serous effusion exist, we shall see, at the end of a few days, this pseudo-membranous coating assume a slight grayish tint, which is lost insensibly as it approaches the surface in contact with the effused liquid.

The consistence of this substance is very weak; nevertheless, it augments according to the time of its deposition. During the first days, a few drops of water can destroy it, dissolve it, if we may say so, and cause it to disappear completely. It sometimes resembles a piece of soap, which dissolves spontaneously in cold water. A little later, (and this period varies according to the continuance of the inflammation,) it acquires more consistence, and gives to the touch the feeling of a velvety surface.

This product becomes much thicker when the inflammation which caused it has continued a long time.

Its augmentation of thickness is made by two different modes. The inflamed surface continues to secrete the coagulable liquid; this liquid traverses the coating which has been first secreted, and fixes itself to its surface. If this surface is in contact with a liquid containing thick particles, these particles are deposited, they fix themselves, and mingling with the coagulable liquid, augments its thickness. This augmentation is then made by coatings, or layers, placed over each other. Those which have been first secreted, consequently those which are more in contact with the inflamed surface, are those which possess the greatest degree of consistence. This thickness also varies; it is much greater when the deposit has continued for a long time. Sometimes it is hardly a hair's breadth in thickness, at other times (and I have seen it) more than an inch in thickness.

Their adhesion is weak; they are easily taken off, but by little scales, and the surface to which the false membrane adheres, preserves its polish and all its anatomical and physiological properties.

This product is also completely a stranger to the economy. It has no proper existence; it is an amorphous product which has only a great tendency to form an organization.

It does not cause by itself any particular constraint in the functions of the neighboring organs, or at least, the constraint it may possess is confounded with that which is due to the liquid which bathes them.

From the moment the deposit finishes, the inflammation is calmed, so that, if we could determine the moment when the deposit is complete, we might be certain that the inflammatory phenomena had ceased or would cease.

This pseudo-membranous deposit does not hinder in the least the absorbent function which belongs to the organ, it even seems that its presence seconds it; for from the moment when the deposit is made, the effused liquid is ordinarily reäbsorbed with a certain rapidity.

The exhalent function of the organ retires to its normal limits, and perhaps the presence of the pseudo-membranous deposit is completely foreign to this return towards the natural state of its function.

The Second Period.—The Mucous State of the Pseudo-membranes.

In this period, the pseudo-membranes begin to acquire an isolated existence. Already the vessels are formed and the adhesion established; they then present the following characters.

Their redness is general, darker, uniform, resembling somewhat that of imbibition; no blood-vessel can be observed, their surface is unequal and irregular.

Their consistence is greater, they can be taken off by larger scales; the liquid which the cavity still contains, in which they are formed, preserves its transparence, and still holds particles in suspension; but these particles are larger, thicker and more consistent, and have a membranous and velvety appearance. Their thickness has diminished. It is in inverse proportion to their consistence; they contract according as they become organized, and the blood with which they are penetrated does not furnish the quantity of serosity which they have imbibed, and they disappear rapidly.

Their adhesion becomes closer, not only with the organ upon which they rest, but also with the new surfaces with which they come in contact, in consequence of the disappearance of the effused liquid. We must remark, however, that for these adhesions to be established between two contiguous surfaces, two conditions appear indispensable: the first is that both should be covered with pseudo-membranous deposits, arrived at the same degree of development, and the second, that no liquid or strange body shall interpose between the two surfaces. It is thus in pleurisy with effusion, the adhesions already so frequent would undoubtedly be more numerous and more extensive if the visceral pleura and the costal pleura were simultaneously covered completely with a pseudo-membranous deposit, and if the liquid disappeared rapidly when the deposit is complete.

During this period of the false membranes the inflammation has completely ceased; the effused liquid has almost entirely disappeared; the new product acquires a new power and commences to have a proper independent existence. In the first period it may be reäbsorbed and disappear; but now the absorbent powers of the economy become powerless and it remains.

The resistance of the pseudo-membranes is always too feeble to place an obstacle to the play of the organs; the disappearance of the effused liquid brings a remarkable ease, and the cessation of the inflammation permits the whole force of the economy to concentrate itself upon the organization of an accidental product which from that time progresses rapidly. It is at this time that it manifests a great tendency to take upon itself all the characteristics of the organ in which it is developed; it is thus, that in the serous tissues it has a tendency to assume the physical characteristics of these membranes and begins to acquire all their properties, and thus according to the completion of its organization, it becomes absorbent or exhalent according to its situation; it is soon covered with a very fine membrane, which resembles perfectly a serous membrane; and it is precisely this circumstance which has often caused the belief that these deposits were subserous.

It is at this period that we must speak of the friction sound which is caused in some cases.

Third Period.—The Cellular and Serous States.

The pseudo-membrane loses that congestive state which existed at the commencement of its organization; it is of a whitish color, of a membranous or cellular appearance, according to the organ in which it is developed. It presents a great degree of resistance and is strongly implanted upon the organs which serve for its base. Its arteries are numerous but very fine; its venous system probably exists,* but I have never perceived it; it has a tendency to contract, and this tendency augments according to the continuance of its organization; it becomes smaller and diminishes in length. Its structure becomes more compressed, and if the organs which it unites remained motionless, as the uterus and the rectum, the omentum and the abdominal walls; or move together as the liver and the diaphragm, etc., the adhesions are close and bind them tightly together. If, on the contrary, the organs move singly or in different proportions, as the lungs and the ribs, the omentum and the intestines, the pseudo-membranes, owing to their elasticity, lengthen in such a manner as to permit the movements of the organs, and cause no interruption to the operation of their functions.

Such are the phenomena common to all pseudo-membranes. We must here notice a circumstance which forms an exception: it sometimes happens that a portion of the effused liquid remains, and no adhesion is formed between the contiguous organs; but the organs, crowded by the liquid and covered by the pseudo-membranous deposit which has been formed, cannot move, owing to the imprisonment in which they are placed, and the pseudo-membrane rapidly acquires a fatty consistence almost cartilaginous, and then constitutes a real malady, the influence of which is felt over the rest of the economy and over the normal form of the cavity in which it was formed.

At the end of this third period, the pseudo-membrane which continues to grow, may take one of these two following directions: either approximate towards the muscular or the bony state.

The Fourth Period.—The Fleshy State.

When it takes a muscular appearance, this period is characterized by the following phenomena: its vascularity is augmented, its color becomes darker, more sanguiue; its tissue is more friable and less areolar; its adhesions become as close as possible; but only with the surfaces which form the elements of their composition. It even appears that this tissue has then a particular tendency to separate from those organs with which it had no connection, save by neighborhood. This separation is made by means of the cellular tissue, one part of which is abandoned by the pseudo-membrane. This cellular tissue afterwards acquires all the properties which are common to it and is even laden with fat: it is a tissue which isolates the pseudo-membrane from some of its neighboring parts. In the tissue of the new organ, we recognise no fibre, no fibril analogous to those we find in the muscular tissue, but already the asperities and inequalities of its periphery are effaced. Then and for the first time, we may remark the commencement of venous vascularization; it also seems that the nervous system is not altogether wanting, for its sensibility begins to be manifested; at last, the traumatic solutions of continuity easily determine the ecchymosis, and even true hemorrhages.

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* Mr. Lespinesse has seen, described and drawn these veins, but it has been impossible for me to see them, even with the microscope.

The Fifth Period.—The Muscular State.

In this fifth period the organization of the pseudo-membrane is finished. We meet it only in the midst of the muscular tissue, which it causes to increase in size, and it also augments its power if it is developed in their centre or at their surface, or when it repairs the solution of continuity, if it is formed owing to a division of these organs. It adheres so intimately to the normal muscular tissue, that it is impossible to see its line of demarcation excepting by its color, which is a little paler; the muscular fibre is shown in its thickness; its consistence is equal to that of the muscle in which it is organized; it is completely isolated from the neighboring organs; its vascularity proceeds from the muscle itself, so that its vitality is subordinate to the last; also, when the physiological action of a muscle has been interrupted or altered, by a partial or total solution of continuity, the pseudo-membrane, having arrived at this fifth period, reëstablishes its anatomical and physiological integrity. For some time it will be paler than the muscle; but in the end it becomes almost as vascular and as dark colored as it; it will never regain its thickness, but it will be as strong and as capable of resistance.

The Fourth Period.—The Fibrous State.

When, instead of taking the muscular direction, the pseudo-membrane has arrived at that cellular state, when it becomes bony, its fourth period, during which it passes into the *fibrous state,* is marked by the following phenomena: its color diminishes, it is of a light pearl tint; its tissue shrinks, becomes thicker, more compact, and loses its elasticity; it has a very marked tendency to diminish in length; its fibres become apparent; its vascularity is only represented by some arteries, which are larger than in the preceding periods, but less ramified, less sub-divided.

The Fifth Period.—The Cartilaginous State.

The vascularity still diminishes, and it even seems as if the arterial trunks, common to the preceding period, diminish in size. In the fibrous tissue, we have just studied, a cartilaginous substance is deposited which spreads over the whole extent of the pseudo-membrane rapidly, and gives it a whitish appearance slightly colored with gray or yellow; according to the organ which supports it. During this period the new tissue is extremely thick, close, not transparent, flexible but not elastic. In its whole extent and thickness it has the same consistence; we can here trace fibres which are not long, but do not seem to cross each other. In the serous cavities, these cartilages are by one side closely attached to the neighboring tissues, which are torn if we attempt to take them off. Their form is modelled always upon the cavity where they are found. Their loose side is always smooth, uniform without inequalities covered with a very fine and perfectly transparent cuticle, which has the appearance and all the properties of the serous surface. This cuticle joins itself intimately to the normal serous tissue at the spot, where the accidental cartilage ceases, so that it is easy to believe that this has been deposited and is organized in the subserous cellular tissue. In the thickness of the parenchyma of organs, these cartilages are every where adherent to the tissue of the organs; when they are thick, their centre has appeared to have less consistence than their periphery; their surface is not smooth, and has numerous risings and inequalities.

The Sixth Period.—The Bony State.

During this period of the pseudo-membranes, we find at first, here and there, bony granulations more or less numerous, but completely isolated from each other; they are rounded; their surface offers great consistence. Little by little these granulations increase in thickness, but above all in extent, and finish by forming plates of greater or less size. These plates are ordinarily constituted by the juxtaposition of bony needles; they present great resistance in their breadth, but it is easy to break them in their length. The cuticle which covers the cartilage, never participates in the work of ossification, and constantly covers the bony plates. Ossification continuing for a long time, the cartilaginous pseudo-membrane is transformed into a complete bony mass. In the serous tissues, this transformation is only remarked in the pseudo-membranes which cover the parietal serous tissue; I have never seen it in those which are developed upon the visceral serous tissues. Ossification in the cavities constantly progresses from the loose side towards the adherent surface; their loose surface is smooth, presenting no roughness, and has a scaly appearance, whilst their adherent surface is almost always unequal and has a granulous aspect. These newly-made bones have a yellow tint, and whatever may be their resistance, they are almost always porous and thin, at least, I have rarely seen them in a compact, polished state.* In the midst of the organs of the parenchyma, on the contrary, these productions are never presented under a granulous aspect—they are true bones, very hard and of a perfectly white color, having a fibrous texture; they are, from the beginning, compact and eburnaceous, it is not until much later, and even a long time after the cessation of the work of ossification, that their centre becomes alveolar and is filled with a transparent, oily substance, without losing either their whiteness or their resistance.

Such is the anatomo-physiological history of pseudo-membranes; we perceive that they pass through a series of very distinct transformations in following the subsequent phases or states:

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* The last case of this kind, I have seen, was presented by me to the Anatomical Society; it was a bony pseudo-membrane, several inches in length, adhering to the falx cerebri; it was completely formed of a compact polished tissue.

1. Soft.
2. Mucous.
3. Serous } The same period.
Cellular }

4. Fleshy.	4 Fibrous.
5. Muscular.	5 Cartilaginous.
	6 Bony.

Whatever may be the state in which we may find the pseudo-membrane at the time we examine it, we may be persuaded that it has passed successively through, and in the order which we have indicated, the different states which, in the scale we have prepared, precede the state which it has arrived at. Thus every muscular state, must have been preceded by the other four states, the soft, the mucous, the serous, and the fleshy. Every bony pseudo-membrane, must necessarily have passed through the soft, the mucous, the serous, the fibrous, and the cartilaginous states.

The rapidity with which this new product passes from one state to another, is governed by certain conditions. In general, a pseudo-membrane which is developed in any organ whatever, arrives rapidly at such a state that it represents upon anatomical examination, the principal characteristics of the organ itself. Thus in the cellular and serous tissues, it rapidly acquires a cellular or serous state; in the fibrous, cartilaginous, and bony tissues, it soon acquires the constitution of these tissues.

Arrived at this point, it represents the organ in which it is developed, the pseudo-membrane possesses the same properties and the same functions as the organ itself; this state constitutes, therefore, the period of complete development, and it is there that it generally stops.

But one of the characteristics of the accidental tissue, is to have a great tendency to extend towards a more advanced state; it is thus that we sometimes see on the pleura the pseudo-membrane which has become musclar advance to the bony state. These are secondary states which we designate under the name of transformations of the pseudo-membrane. Thus, therefore, the transformation commences from the moment the new tissue abandons the structure and the functions of the organ in which it has been developed.

Every transformation follows an infallible, inevitable course. It passes successively through to arrive at a more complex state, the different states, which separate its complete state from that which it next takes, as we have already indicated.

The pseudo-membranes, whatever may be their complete state, arrive rapidly at it in traversing the different intermediate states; but as soon as they have arrived at it, their transformation is always slow.

Thus a pseudo-membrane of the pleura soon arrives at its complete state, that is to say, the serous state; in many cases a few days suffice; but this same membrane takes several years to assume the bony transformation, whilst the pseudo-membrane of the bone arrives in a few days at its bony period, passing through, nevertheless, all the intermediate states.

Making a direct application of the data with which we are furnished by the history of pseudo-membranes, we do not fear to advance; that all solutions of continuity, all the losses of substance are reëstablished by the aid of the pseudo-membranes, which, whatever may be the organ in which they are developed, have a tendency to take not only the structure of the organ but also its functions; this we have already seen in the serous; and if we pass in review the other tissues we shall find a phenomenon altogether analogous; a tendon is divided, a plastic exudation is made; this exudation passes successively through the mucous state, the cellular state, arrives at the fibrous state, and the solution of continuity is repaired, the tendon recovers its strength and its natural functions. If a bone is fractured, a plastic exudation is made, it passes successively to the mucous; cellular, fibrous, cartilaginous and bony states, and the bone recovers its original solidity.

If a nerve is divided for neuralgia, for example, the pain and the sensibility disappear; a plastic exudation is made which passes rapidly to the mucous, cellular and fibrous states, and a few months are hardly passed when we see the solution of continuity repaired, and the sensibility not only return but the neuralgia.

The cicatrix of the skin follows the same law; a few days often suffice for them to attain a solidity as great as the cuticle itself, and even for it to recover in part, and sometimes integrally, the special sensibility of this tissue.

We will here make a remark of some importance; whenever a solution of continuity suppurates, the pseudo-membrane inevitably arrives at a soft state, then a fleshy state, and at the end of a certain time it passes to the cellular, fibrous states, etc., according to the nature of the organ affected.

As in all the accidental tissues which are formed in the economy, the pseudo-membranes are exposed to certain maladies whose course is different to that which they take in the normal tissues. One of their morbid phenomena and the most characteristic, is to be very easily affected by changes of temperature. Where is the physician who has not often seen persons affected with pain in the callosity of a fracture, in the cicatrix of a stump, in the cicatrix of a burn, of a large wound, etc., whenever the weather changes, and particularly when it is from dry to humid, so shat these tissues seem like hygrometers?

The inflammation which attacks them causes them to disappear with an astonishing rapidity, and this rapidity is great in proportion to the age of the pseudo-membrane.

These products have the property of drawing to them the localization of the diatheses; thus a person who carries in him the germ of cancer will find the localization of this affection made in those organs which contain the pseudo-membranes. It is from want of observation of this fact, that cancer has been thought the result of inflammation, inflammation has formed a pseudo-membrane, and this pseudo-membrane has been the seat of predilection in which the cancerous localization has operated. It is thus with scrofula, which is localized so often in an organ which has received a contusion, or a solution of continuity. Almost every one has seen examples of the localization of tertiary syphilis in accidental wounds; certainly it is not inflammation which has engendered the syphilis nor the scrofula, neither does it engender cancer, only it determines, by the pseudo-membranes which it furnishes, the place of the localization. Hemorrhages of the pericardium, of the pleura, of the peritonæum, etc., are all preceded by a pseudo-membrane of these organs. I have seen a man who had a double pleurisy with effusion, which was of eight months' standing, and which had resisted all treatment; this sick person fractured his leg, which did not consolidate; Dupuytren thinking that the non-consolidation was owing to a syphilitic affection, submitted the patient to an anti-venereal treatment; the fracture consolidated and the double pleurisy disappeared as by enchantment. Dupuytren had so often cured syphilitic sarcocele, which was reputed cancerous, by anti-venereals, that he often said, "never remove a testicle before submitting the patient to anti-syphilitic treatment."

To return, the pseudo-membranes draw the diatheses to them, and they serve for a field of localization. Pseudo-membranes may disappear spontaneously, without previous inflammation. It is thus that cicatrices often reöpen without any cause; well-consolidated callosities are resolved and disappear. These spontaneous disappearances of the pseudo-membranes, merit our attention for a moment. We must not suppose that these tissues disappear suddenly as a tumor disappears, which is removed. We have already seen that a pseudo-membrane (a callosity for instance,) having arrived at its point of perfection, has passed through a series of transformations; it was at first soft, then mucous, cellular, fibrous, and cartilaginous; now when a callosity disappears, it repasses by the same periods, but in an inverse way; that is to say, that it at first becomes cartilaginous, then fibrous, cellular, mucous, and soft; it is then, but then alone, that it is reäbsorbed. Sometimes it stops in one of these periods, the fibrous period for instance; but in that case it does not disappear. To return, a pseudo-membrane to be reäbsorbed, must always, whatever be its development, to regain its soft state, descend the scale by which it has risen to its development.

Reflections. Having considered the pseudo-membranes in this manner, we may perhaps change this word for another more suitable, and which will explain our idea in a clearer manner; this word is "*Neo-organes*;" for all these inflammatory productions are the production of tissues analogous to some tissue of the economy; in the skin it is a cicatrix analogous to the skin; in the mucous, serous, synovial tissues, they are pseudo-membranes which resemble them; in the nerves, it is a nervous cicatrix; in bones, it is an osseous callosity, and I doubt not, that in the organs of the parenchyma, these "*neo-organes*" assimilate with the organs in which they are developed. Armand Casel, the illustrious editor of the National, had some years before his death, received a sword wound, which passed through the liver; at his autopsy, I found on the surface of the liver cicatrices, which showed the entrance and exit of the sword; there was no tracé of fibrous nor cellular tissue, and I am convinced that the pseudo-membrane, which had been formed during the suppuration, had gradually acquired the anatomical and physiological properties of the hepatic tissue. In this manner, we find, that all solutions of continuity of these tissues are made. Nature makes use of the pseudo-membrane, to reproduce all tissues of restoration, as it uses cellular tissue to produce the organs. This last consideration appears to us of the greatest importance; it will serve at a later period to explain the progress and cicatrization of abscesses.

Art. VIII.—*Extracts from the Reports of the Proceedings of the New-York Pathological Society.* (Selected and prepared by Committee of Publication.)

Cases of Chronic Abscess in Cellular Tissue of the Peritoneum.—Remarks.

By Lewis A. Sayre, M. D.

Case.—Mrs. Clark, aged thirty-six, of scrofulous habit, had syphilis fifteen years since, contracted from her first husband. Had chancres and buboes, and afterwards ulceration of the throat, of which she recovered: but has been subject to rheumatic affection ever since, upon the slightest exposure.

About eight years since was pregnant, and aborted at the third or fourth month, was confined to her bed for nearly two years, and has never enjoyed good health since. Has been most of the time under the charge of a physician, and treated for a variety of complaints. Some calling it an affection of the uterus, some of the kidneys, liver, lungs and so on; but the diagnosis always being obscure.

I can only get a history of her symptoms for one year back, from her last attending physician, who found her with cough, no expectoration, night sweats, rapid and weak pulse, morbid appetite, frequent stools, sometimes natural, and sometimes dysenteric. Suppressed menstruation, with great pain in the pelvis, hard and tender os uteri. And by speculum examination showing great turgescence of the vessels. The uterus was immoveable, either from having gained adhesions or from the pressure of a tumor—(the latter was supposed to be the case.) The limbs frequently disposed to be flexed, and for the last two months of her life, it was almost impossible to make them assume the straight position. Pain in the lower extremities, and great difficulty in walking.

About four months previous to death she had a copious discharge of pus by the bowels, which continued for some time, varying in quantity from day to day. A few weeks previous to death her bowels became regular, and her appetite morbidly increased. She was under the treatment of a number of the best physicians in the city. But gradually sunk and died with hectic, on the tenth of January, 1845.

Post-mortem, with Drs. Parker and Smith, twenty-four hours after death. Face and upper extremities much emaciated, abdomen and thorax distended from internal effusion—lower extremities œdematous, and strongly flexed, both legs and thighs, requiring great force to straighten them.

The bowels were healthy at the upper extremity; but a number of small round ulcers were found at the lower portion of the small intestine, and near the lower extremity of the ilium was a large ragged ulcer, which communicated with a large and firm sac, occupying all the cavity of the pelvis.

There had been extensive peritoneal inflammation, of long standing, and the intestines were so agglutinated together that it was difficult to distinguish one part from another, and required the cutting edge of the knife to separate them.

A large dark-colored fluctuating tumor occupied the cavity of the pelvis, but did not extend above the linea-ileo-pectinea; it was strongly adherent to the rectum and colon, and a number of the small intestines. In getting it out, it was accidentally ruptured, and discharged a quantity of purulent offensive matter.

The walls were much thickened and rough internally, and would contain about half a pint.

The lower portion of the ilium, which was attached to the top of the cyst, and had an opening communicating with it, had the same thickened and rough appearance as the walls of the sac.

The uterus was firmly attached to it—was thickened and its cavity much diminished.

The rectum was closely attached to the cyst and much compressed by it, passing over the promontory of the sacrum, and down on the *right* instead of the left side—no ulceration had taken place through it, and its internal structure appeared perfectly healthy.

With the finger passed into the rectum the tumor could be readily felt indistinctly fluctuating and doughy.

Two small tuberculous depositions were found at the inferior portion of the bladder near the urethra—and a tuberculous abscess in the kidney as large as a white walnut and filled with cheesy matter.

The other abdominal viscera presented nothing remarkable.

The lungs had a few tuberculous depositions in various parts, and the left inferior lobe was hepatized, the pleura strongly adherent.

The cavity of the thorax, as well as well as the abdomen were fully distended with turbid serum.

Case 2.—Miss M——, who died on the fourteenth of April, 1844, after an abortion produced the January previous by the notorious *Mad. R*——. I am indebted to Dr. Moses for the notes of this case, which he has taken very fully of all the different organs, but as the abscess and abdomen are the only parts of interest here I shall omit the rest.

Abdomen.—Adhesions, apparently of several months' standing, of liver to peritoneum, of abdominal parietes, and of small intestines to each other, and omentum—small intestines enlarged to size of colon. Coats much thickened, and rough internally by effusion of lymph in large patches.

Colon eight inches and a half across, thickened in all its coats, in a state of chronic inflammation with numerous patches of firm white lymph. *Rectum,* reddened in lower part, upper part pale and smooth, with the exception of a rounded elevated spot like the pointing of an abscess, directly opposite to the fundus uteri, and about an inch lower down, a greenish almost gangrenous spot, the size of a two shilling piece.

The whole mass, rectum, vagina, uterus, and bladder were removed entire, and on making another examination of the specimen with Dr. Gilman, the fluctuation of an abscess was discovered around and about the above mentioned elevated spot in rectum, and laid open by him, and an abscess containing half a pint of light greenish pus was found, situated either between the uterus and rectum, or else in the walls of the latter, presenting the appearance of an old abscess of at least several months' standing, its walls organized and coated with irregular granulations of white, firm lymph.

These two cases are so similar, that one description would almost answer for both, and shows the difficulty of detection except by examination per rectum.

In Dublin Medical Journal, Sept., 1843, p. 1, are 20 cases given of abscess of uterine appendages, by *Fleetwood Churchill.*

It may occur in the ovaries, broad ligament, or cellular tissue; in 23 cases, it occurred 9 times on right side,
“ 6 “ left “
“ 8 “ unknown.
23

Pain maintains its seat as a general rule in the tumor, from whence stings of pain radiate in all directions.

When the tumor is high, i. e., above the brim of the pelvis, the pain is more confined to the tumor.

When the tumor is low, i. e., below the brim of the pelvis, pain extends down to the anus, across the pelvis to the back and down the thighs.

In this latter position it is almost impossible to straighten the thighs; the patient is often distressed by tenesmus and a desire to make water.

Fever sometimes precedes or accompanies the first local symptoms; in others, fever only supervenes after the tumor has been detected some time. In a few cases the fever is almost wholly confined to the evening. During the course of suppuration, there are in almost all cases evening exacerbations of fever.

The pulse ranges from 90 to 110, tongue is loaded, skin hot, thirst considerable, urine high colored, appetite always bad.

Terminations in resolution in	6	cases out of 23.
Opened through abdominal parietes,	2	“ “
“ peritoneum,	3	“ “ all recovered.
“ vagina,	2	“ “
“ bladder,	2	“ “
in surrounding cellular tissue burrowing in different directions and down the thigh,	2	“ “
	17	
	6	unknown.
	23	

This disease has *been mistaken for Sciatica*, for when the tumefaction is mainly confined to the pelvis, and pressure is made on the nerves issuing from that cavity, the pain may be limited to the nerves of the back, so as to deceive any but a careful observer.

It has *been mistaken for gravel*, and patient treated for weeks for frequent desire to make water, with difficulty in passing it, and reddish sediment.

The tumor may be so large as to reach umbilicus, and patient lose for a time the use of the leg on the side affected.

If the *vagina* be harder than natural, and pressure be painful, then the tumor points near vagina.

Same also is the case with the rectum.”

Tonelli found 58 cases of ovarian inflammation, and 4 cases of abscess in 19 cases of puerperal fever.

Invasion. In some cases there is mere uneasiness, not amounting to pain, in one or both of the iliac regions, and a tumor may be discovered by placing the hand upon the part.

On or *after a favorable convalescence,* some patients get a slight febrile attack, with some shooting pains in abdomen which may soon subside; *but fever remains without any apparent cause.*

In other cases the nature of the affection is very evident, fixed pain in one or other of the iliac regions, tenderness, and afterwards a tumor.

Again it may assume the character of general *peritonitis,* the pain extending over the whole of the abdomen, generally recurring in paroxysms, with general abdominal tenderness and fever. But *after awhile the extended pain and general tenderness subside, and becomes localized in one iliac region.*

In *one* case there was only severe pain in the course of and limited to the sciatic nerve, and as this was the only complaint, patient was treated for sciatica."

Chomel also, in his clinique of 1842–43, gives 34 *cases* of inflammation of uterine appendages, and abscess of pelvic peritoneum, all of which except 6 followed delivery either directly or indirectly.

Symptoms.—Chills, then ill defined pains in hypogastric region, fetid smell of lochia, *more or less fever, and general prostration.*

When these symptoms set in, we must always watch for disease of the uterus or its appendages. When the uterus is sensitive to touch and more voluminous than should be, there is no doubt of metritis.

If the *anus,* the broad ligament, and the surrounding cellular tissue are the seat of the inflammation, then by examination per vagina, rectum, or from abdomen, you will detect a tumor more or less elastic, or fluctuating.

This tumor sometimes terminates in resolution; *but more frequently opens into the rectum, vagina, or bladder.*

Whenever a physician observes these symptoms, just after delivery, with fever, he should immediately turn his attention to these parts, and make frequent examinations, especially of *rectum* and vagina.

The same symptoms are sometimes observed in *men* who are suffering from tumor in rectum; we also find *legs retracted* and sciatic neuralgia.

Chomel thinks these abscesses open into the *rectum* more frequent than any other organ; he has detected them by examination per rectum, when they could not be found in any other way, and opened them with a trocar through rectum successfully, and thinks this course of treatment by all means advisable in order to prevent their opening into the peritoneum.—*Feb. 12th,* 1845.

Report on the Pathology and Diagnosis of Chronic Scrofulous Disease of the Testicle.

By T. M. Markoe, M. D.

From what I can gather from the authors I have had an opportunity of consulting, there appear to be several morbid conditions of the testicle entirely distinct one from another, which are liable to be confounded under the general name of scrofulous disease. Of these we have, 1st, Tubercular disease, properly so called: 2d, Simple Chronic Inflammation, and 3d, Syphilitic Inflammation. True, tubercularization of the testicle is a condition which, though rare, is of sufficiently frequent occurrence to have been fully investigated in all its stages. The tubercular deposit in this organ is, in all respects similar to, and in its progress and termination obeys all the laws which regulate and characterize the disease in other parts. A single large crude yellow tubercle may occupy a portion of the substance of the organ, or many smaller ones may be found disseminated through it. Occasionally the whole structure of the organ is absorbed, and crude tubercular matter occupies its place. Numerous small granular tubercles have been seen, but I am not aware that the first stage, or that of the gray semi-transparent miliary tubercle has ever been met with. The epididymus is rather more often the seat of this disease than the body of the testicle. In whatever form, however, they may be deposited, their tendency like all other tubercles is to soften and find an exit from the body by inflammation and ulceration of the tissue surrounding them. Hence abscesses, which on breaking give exit to the softened tubercle mixed with pus, and leave behind them sinuous cavities which it is almost impossible to heal. The substance of the testicle with the exception of its being encroached upon, and in part absorbed by the foreign deposite, generally is found very nearly in a healthy condition, though sometimes, from the irritation of the foreign body inflammatory products are developed round it. Another though a rare termination of the tubercular form of disease is the cretaceous change which it occasionally undergoes, in which it becomes converted into a dry chalky mass, every way similar to the cretaceous bodies sometimes found in the lungs and bronchial glands.

The second variety of disease which is sometimes classed as scrofulous, is simple chronic inflammation, a disease of vastly more frequent occurrence than the one first considered. This affection, as its name imports, is supposed to be simple inflammation of a low grade of intensity and of a prolonged duration, sometimes assuming this chronic character from its commencement, and sometimes falling into it after an acute orchitis. It is distinguished however from most other organic inflammation by the remarkable constancy with which it is attended with a peculiar soft yellow deposit into the inflamed parenchyma. This deposit has very much the color and consistence of custard, and appears to consist of concrete fibrine perhaps mixed with pus. It is in every respect like the soft yellow jelly-like fibrinous deposit which is seen in such abundance in and around joints that have been long inflamed and suppurating. It is sometimes deposited in single masses of considerable size, and sometimes appears disseminated more or less thickly through different parts of the organ. It does not seem to displace and absorb the surrounding tissues precisely as pus or tubercle would do, but to be an infiltration into the meshes of the parenchyma which is more or less altered and destroyed by its presence. It tends to become more and more firm, to pervade more and more of the surrounding tissues, and to become more intimately blended with them. If the disease be unchecked by treatment it continues its encroachments until inflammation and ulceration of the integuments take place, and a fungus-looking growth protrudes which has received the name of hernia testis. In other cases, after reaching a certain point it ceases to increase, and begins as it were, to shrivel and contract, so that after a long period of time the organ which before was enlarged becomes atrophied to a mere vestige, while the yellow deposit has become a dense fibro-cartilaginous body which may be compared to a cicatrix. Acute inflammation terminating in suppuration, is another mode in which this disease terminates in hernia testis. Sometimes, as in the specimen presented, the parts of the organ not invaded by this yellow matter are perfectly sound; in other cases they are more or less indurated and disorganized. With regard to the seat of the deposit there is nothing satisfactorily ascertained; some considering it as being poured out upon the internal surface of the tubuli, while others, among whom is Cruveilhier, say, that it is effused into the cellular net-work of its parenchyma.

The third variety of disease which I have mentioned is chronic orchitis, arising from a syphilitic taint. But little need be said, however, on this form, for its anatomical peculiarities differ in no respect from ordinary inflammation except that it rarely suppurates or terminates in fungus.

These three morbid states of the testicle then, or rather perhaps I should say, these two, (classing the last two as one,) differ most essentially, as far at least as their pathological anatomy is concerned. In one we have tubercle softening and opening for itself a passage by ulceration and abscess, leaving behind deep incurable fistulæ; in the other we have the yellow substance pushing its way to the surface, ulcerating and finally springing up as a hernia testis. It may be remarked, however, that when inflammation and abscess do occur in this latter, the cavities are about as obstinate in their resistance to remedies as the tubercular cavities.

As the points referred to me by the Society have reference particularly to the pathological anatomy of the disease in question, I have not felt called upon to go into their symptomatology. There are two general features in which the diseases differ that I think too important to be omitted. The tubercular testis is generally a mere accompaniment to some other and more important disease going on in some other organs which are the points of paramount interest to the patient as well as to the practitioner, while in chronic inflammation the testicle is the primary and all important centre of diseased action. This difference, it appears to me, is of great consequence in marking a distinctive character in the two diseases. Finally the tubercular disease admits of no cure except by the destructive processes which nature sets up for its elimination, while both simple and syphilitic orchitis may be considered as very amenable to remedies in all but their latest stages, when they have reached the point of more or less complete disorganization.—*April* 30, 1845.

Case of Solitary Hydatid of the Uterus.—Remarks.

By Wm. H. Macneven, M. D.

Mrs. M——, aged 30, has been married three years. About the ninth week of her first pregnancy she had a miscarriage, she soon became pregnant again, went to the full period, and about fourteen or fifteen months previous to the present confinement was delivered of a large child, which, however, was still born, in consequence of the descent of the cord. She told me that on this occasion a very unusual quantity of water was discharged. Subsequently to this she suffered two successive abortions at about the eighth or ninth week.

In the last miscarriage, which occurred on the first of January of the present year, she had twins. She became again pregnant before the first of February, and on the fifteenth of last month (October) was taken in labor at the full time. On my arrival about two hours after the commencement of labor, I found the os uteri well dilated, and what appeared to be the distended membrane protruding. I was unable however, either during the continuance of a pain or in the interval of repose, to distinguish any presenting part of the child. The pains were very strong and recurred as often as every two or three minutes. The abdomen of the woman was unusually large and prominent, so much so as to induce her to suppose that she was carrying twins. The os uteri seemed to yield readily to the pains, allowing, as I perceived, the distended membranes to protrude more and more through its orifice. Owing to this circumstance, about twenty minutes after my first examination, on attempting to make a second during the existence of a pain, I found that the membrane protruding through the os uteri had formed a sort of pouch, which so filled up the vagina that I was obliged to desist from introducing my finger until after the cessation of the pain. The result of this examination was not more satisfactory than the first. I concluded however, under the circumstances, to await the rupturing of the membranes without interference in order to allow the process of labor to advance in the mean time as far as it would. Suddenly during a severe pain, attend with an exclamation from the patient, a large smooth mass was expelled through the vulva into the bed, passing over my hand in its course. Raising quickly the bed-clothes I discovered a large smooth membranous cyst of an oval form, and about the size of a sheep's bladder; it was distended with a thin fluid of which it could not have contained less than two pints. Its surface was perfectly smooth except at one place, where was a loose membranous appendage formed by a fragment similar to, and continuous with the external layer of one of the membranes of which the cyst appeared to be composed. This undoubtedly had been the only point of attachment which it could have had when in the cavity of the uterus. No liquor amnii accompanied its expulsion nor did the bulk of the woman's abdomen appear very materially reduced by it; but before I could remove it from the bed, which I immediately made an attempt to do without breaking it, a severe pain seized the woman, caused the bursting of the membranes within the uterus and the sudden discharge of a quantity of liquor amnii sufficient to deluge the bed. Unfortunately, whether owing to the force of the waters or the crowding against it of the woman, the cyst, which I was very anxious to remove from the bed uninjured, broke almost at the same moment and mingled its contents with the liquor amnii, which, I might here observe, the former very much resembled.

The cyst which I presented at the last meeting, the gentlemen of the society have had an opportunity of seeing; it was fortunately not so much injured as to prevent a pretty correct opinion to be formed of its original dimensions. On now making an examination to ascertain the nature of the presentation, I found that the same accident to the child which had attended a previous confinement of the mother, had again very singularly occurred. Several inches of the cord had escaped before the head, and the child, which was a remarkably large one, was in consequence lost before its delivery was effected.

Now a question arises as to the nature of this phenomenon. Was it an enormous hydatid simply connected with the ovum? or was it a distinct blighted ovum, of which the fœtus had at a very early period been absorbed? I have not been able to consult a sufficient number of authorities to know whether a case precisely analogous has been recorded in favor of the latter of these hypotheses.

Churchill, in his work on diseases of females, says, in reference to this subject—"In most of these blighted ova, the fœtus is altogether wanting, having been dissolved in the liquor amnii; we may however generally discern the remains of the umbilical cord attached to some part of the inner surface. In addition the membranes (chorion and amnion) may be traced with the placental development on some portion of the periphery of the ovum." He again observes that the death of the fœtus in these instances may result from "a tumor at the root of the cord, or the cord being inserted where the flocculi of the chorion are deficient, or into a portion where the placenta is not." In the History of the Academy of Sciences for 1714, is the case of a woman who happened to fall in the the third month of pregnancy. The belly, however, increased in size till the fifth, when it began to lessen. In the sixth she was delivered of a bag, as large as the fist, with a placenta and fœtus only the size of a kidney bean. In this case hydatids were not formed.

John Burns observes "hydatids may enlarge the womb, and these frequently are found in consequence of the destruction of the ovum." After describing the usual form in which they appear, he says, "sometimes there is only one large hydatid, or at most a very few in the womb. In the advanced stage, we find the belly swelled as in pregnancy; but the breasts, although sometimes tense, are oftener flaccid, and no child can be discovered in utero, nor does the woman perceive any motion. There may be pain in the abdomen, and obscure fluctuation is discernible externally, whilst per vaginum it is more distinct. The neck of the womb is small and the case much resembles ovarian dropsy, except that tumor occupies the region of the uterus. The duration of this complaint is uncertain; but the water is at last discharged suddenly, and after making some exertion. The bag afterwards comes away, and the process is not attended with much pain. This disease, a solitary hydatid, is oftener combined with pregnancy, or with a mole, than met with alone. The first combination is not uncommon, and I have seen the hydatid expelled some weeks before labor." Hildanus gives an instance of the second, where the ovum was converted into a mole intimately connected to the uterus, and complicated with a collection of fluid to the extent of six pounds. In this case, so much irritation was occasioned as to exhaust the strength and produce local inflammation. Hildanus relates the history of a woman who was supposed to be pregnant, but, dum noctu cum marito rem haberat, a sudden inundation swept away her hopes. The same author relates a case of this kind in his own wife. He also tells of a woman who, in the fifth month, was delivered of a molo aquosa, or vesicle containing ten pounds of water; she did not miscarry, but went to the full time.

Hoffman mentions a woman who had a constant stillicidium, a pint being discharged daily. It at last proved fatal.

Kirkringius, p. 28, considers dropsy of the uterus as impossible, and says, that every case of collection of water depends upon a large hydatid. Dr. Denman seems to be much of the same opinion. A gentleman recently elected a member of this society, Dr. Taylor, mentioned to me two or three days ago, a case of abortion occurring in his own practice, in which he obtained an ovum of six weeks, having a single hydatid attached to it, of a size exceeding that of the ovum itself.

In regard to the specimen forming the subject of this paper, though its large size suggested the possibility of its being a distinct blighted ovum, yet the total absence on any part of it, of all remains of placenta or cord, as alluded to by Churchill, leaves little or no doubt that it has been a large hydatid which has been attached to the chorion in a manner happily illustrated in the specimen obtained by Dr. Taylor.

Poisoning by Opium.—Post-mortem Appearance.

By James R. Wood, M. D.

Mrs. ——, aged 68, died June 15, 1847, fourteen hours after having swallowed an ounce of laudanum, administered by mistake on the part of the apothecary, who sold it for tinct. rhei. The examination was made by request of the coroner, and was held 21 hours after death.

External appearances.—The body was resting upon the back, and there was sugillation of the most depending parts, (as the occiput, neck, posterior part of arms, back, and lower extremities.) Countenance livid. Pupils dilated. Abdomen much distended with gas.

Head.—The vessels of the scalp were engorged. On removing the skull-cap every appearance of congestion was presented. Serous effusion between the arachnoid and pia mater, with great turgescence of the vessels of the latter. These membranes, when examined by transmitted light, presented the appearance of a thin section of recently-coagulated blood. Making a section of the brain, and bringing into view the centrum magnum ovale, bleeding vessels presented themselves at every point, and especially at its periphery. There was considerable effusion in the ventricles. The plexus choroides and velum interpositum were very much congested. Cerebellum congested. In other respects the brain was natural.

Thorax.—The thorax being laid open, old adhesions of the pleura were found, and in each pleural sac a small quantity of serum. The lungs were very much congested, but crepitant. The pericardium was roughened; and on inquiry it was ascertained that she had some years previously suffered from acute rheumatism. It contained no more serum than usual.

The heart was natural in size and structure. Its veins were congested —blood fluid. The ascending and descending venæ cavæ were loaded, and the right heart filled with blood. Calcareous deposit in the arch of the aorta.

Abdomen.—The abdomen contained but a small quantity of serum, not more than an ounce. The liver was of the usual size, but little softened, and more congested than natural. Gall-bladder large and fully distended. Pancreas and spleen normal. Kidneys much congested—otherwise healthy. Womb and its appendages healthy. Bladder empty and natural. Intestines filled with gas only, and much distended. Stomach of natural size—its veins much engorged. Its contents small in quantity, (perhaps ℥j.,) and apparently consisting of fragments of potato, emitting an acid odor. No odor of laudanum could be recognised. The mucous coat about the cardiac and pyloric orifices presented small patches, which were congested and somewhat softened.

Pathological Anatomy of Yellow Fever.

By Drs. W. C. Anderson, Ashbel Smith, and Prof. Dickson.

Dr. Anderson, of the "Seamen's Retreat," S. I., exhibited the contents of the stomach, taken from two patients with yellow fever, enclosed in sealed phials, one from Staten Island and the other from New-Orleans. The appearance was the same in both—a dark browosity, coffee-looking fluid. Dr. A. stated that about 100 cases had occurred on Staten Island, of whom 12 had died. In the opinion of Dr. A., it is the real imported yellow fever.

Dr. Ashbel Smith, of Texas, said that he had seen, with Prof. S. H. Dickson, cases at Staten Island, and considered the disease to be the same as that which prevails in Southern climates. No symptoms were present which were not in the Southern disease—of this there was not the slightest doubt. The disease was very little, if at all, modified in this (N. Y.) climate. He had seen two post-mortem examinations of cases (on S. I.) with real black vomit. He had frequently elsewhere examined many cases after death, and found the yellowish, fawn-colored liver. In yellow fever, it is generally of a saffron, coffee and milk, or straw-color. Louis says, discoloration was uniformly found in the yellow fever of Spain. The same result is often found elsewhere. Sometimes the claret-colored liver has been found. At New-Orleans and Mobile he had noted the same—sometimes had seen it of an intense mahogany color. Within the last year had seen some of this class. He thought that these dark-colored livers depended upon hemorrhage into the substance of the liver, particularly when accompanied with black vomit. He had never seen hemorrhage into the thoracic cavity, but had seen it in every organ of the abdominal cavity. In examinations after death, hemorrhage is very frequently found, even when not suspected during life. Dr. S. stated that he had frequently seen it take place into the mucous coat of the bladder, and also that of the gall-bladder, into the cellular tissue around the renal capsules, between the peritoneum and the abdominal walls, and under the skin, externally. This last proves fatal. Hemorrhages from the vagina are frequent. So also into the stomach. He had found this in every case where no medication had been employed. Some of the first cases which he saw died without treatment. In these, the mucous membrane for three or four inches around the cardiac orifice of the stomach was found natural in thickness but injected with blood. Beyond this portion it was thicker than natural, softened, and flocculi of black vomit in the orifice of the stomach. Black vomit never adheres to the natural mucous membrane. Dr. S. believed the black vomit to be formed of blood, or its materials, thrown off from the mucous membrane by loss of its contractility. The first portion invaded is the pyloric orifice. From this point it gradually extends towards the cardiac portion. Sometimes he had seen the stomach inflamed. It is easy to distinguish this from the other state in which black vomit is present. He had seen recoveries even when black vomit was present. General Balis had black vomit, with hiccough. He threw up about a drachm at different times. Sometimes it was in the form of flocculi mixed with fluid—sufficient to make the fluid spotted. This was carefully examined, and there was not the slightest doubt of its character. He had never seen so much as half an ounce thrown up at a time and recovery take place.

Prof. Dickson had seen several cases of recovery from black vomit—at least ten. He believed black vomit to be a hemorrhage—he had pressed it out of the vessels. Black vomit, like many other symptoms of yellow fever—even the yellow liver—was not exclusively peculiar to it. The fawn-colored liver, however, he believed to be so. He had seen black vomit in other diseases—for example, in the vomiting of pregnant women, in some catarrhal fevers, and in hypertrophy of the heart. Was not satisfied upon what it depends. It is a peculiar state of the system. Diseases change accordingly—and it is so with yellow fever. The disease has now more of the congestive form. In 1818–19, saw cases of it die, in which there was no hemorrhage. This state was attributed by some to the use of calomel; but in some cases the expectant plan was tried—there was the same vomit. I believe that death is caused by changes of the blood; it has lost the life-giving power. I have lately seen black vomit thrown up in a case of abdominal tumor. Often there is gastro-enteritis. Black vomit is never found in the gall-bladder, but a glossy fluid is often seen there in yellow fever cases.

Dr. Anderson stated that the practice of Staten Island had been calomel, followed by oil and sulph. quinine in large doses, say 20 grs. It sometimes had the effect of changing black vomit to arterial hemorrhage. ʒij. of quinine had been given in eight hours. From this he had seen the contracted pupil dilated, and the patient recover. Others had used quinine more moderately. There was great distress at the epigastrium, for the relief of which leeches, blisters, and sinapisms had been used with good effect. The yellowness of the skin occurs more frequently after death, when the face becomes of a mahogany color. In one case, both the face and liver were of this color. In some cases the fawn-colored liver was found. In the present epidemic stimulants do not agree well. Both lemon and beef juice are retained well. Beef-tea is generally thrown off.

Dr. Ashbel Smith stated, that he had seen a negro servant with yellow fever, who had copious uterine hemorrhage. With regard to recoveries from black vomit, some years were better than others. Blood is often pressed out largely from different points of the prima via, from minute orifices. In such cases dark discharges were sometimes followed by light ones.

Prof. Dickson said that he had heard of two cases of black vomit where recovery took place. One, where there was a large quantity for a number of days (14). Another, a child, who, when convalescent, threw it up freely for two or three days—the convalescence did not appear to be retarded in the least by its occurrence.

Dr. Ashbel Smith said that the practice of the South was rather averse to the use of calomel in this disease. A neighbor of his in Texas, had lost only three out of 100 cases. Another in Mobile, Dr. Wait, only one in 100 cases. With us the patient is put at once under the bedclothes, takes a dose of oil, or a mild dose of senna and aniseseed, *and no other medicine.* The fever subsides of itself. Afterwards, as a tonic, we give London brown stout. Quinine only occasionally. It was given last year in New-Orleans occasionally, but did not answer well. Good nursing is every thing. It is all-important to watch carefully the patient, and not allow him *for a moment even*, to be uncovered. During the first twelve or fourteen hours, ice may be used; afterwards mild tepid drinks. Infusion of orange flowers are much used with us.

In answer to a question proposed by a member, Dr. S. stated that his opinion was unfavorable to the idea of contagion—while occasionally some strange facts have been observed as to this point. He would not pretend to speak decidedly.—*Sept.* 13, 1848.

Art. IX.—*Death from Chloroform.* Reported by Gurdon Buck, Jr., M. D., one of the Surgeons to the New-York Hospital.

John Griffin, seaman, aged thirty-one years, born in Ireland, was admitted, December 4th, 1848, into Ward No. — of the Medical Department, with diarrhœa first contracted in Mexico while attached to the U. S. squadron and which had been releived in the Vera Cruz Hospital. From indulgence in strong drink a relapse had been brought on, for which he now sought relief in the New-York Hospital. On the 19th of December, being cured of his diarrhœa, he was transferred to the second surgical division, on account of hæmorrhoidal ailments and chancres of the prepuce with phymosis.

Patient suffered very severely from the hæmorrhoids, and owing to the excessive irritability of the parts he would scarcely allow the nates to be separated for examination. On or about the 26th of December, with the patient's consent, chloroform was given for the purpose of making an accurate examination of the rectum. No unpleasant consequences followed and the patient appeared as well in every respect after as before the administration.

On the 19th of January, patient appearing perfectly well except his local ailments and having never complained of his head or chest, nor experienced any bad effects from the first administration of chloroform it was administered a second time at half-past one o'clock, P. M., preparatory to the removal of the hæmorrhoids and the operation of circumcision, in the presence of the clinical class. A napkin with chloroform sprinkled upon it was applied over the mouth and nostrils, the patient lying upon his back with his head elevated.

He soon became excited, tossed about his limbs and talked incoherently in a loud stammering voice. The muscles of the limbs and trunk were rigidly contracted, in a few moments, however they relaxed and patient became more tranquil. He was now turned upon his left side to facilitate the operation on the fundament which was promptly performed and consisted of the excision of two external tumors at the verge of the anus and applying a ligature to one small pedunculated internal tumor. Directions were now given to turn the patient upon his back for the remaining operation on the prepuce.

At this moment my attention was called to the patient by the assistant asking for a cloth wet in cold water. On examination I found his face and lips very livid, the eyes turned up, the whole body relaxed and the pulse imperceptible at the wrist. After two or three gasps at long intervals he ceased to breathe. The napkin had already been removed a moment or two before the wet cloth was called for. The patient's face was turned towards his left shoulder and concealed so as to be out of view of the assistant standing on the patient's right. In turning the face forwards and bringing it into view alarm was excited by the appearances already noticed.

The windows were immediately opened and fresh air admitted. Fumes of ammonia were presented to the nostrils and frictions applied and persevered in for a long time, but without avail. The time that elapsed from the commencement of inhalation to the fatal issue was estimated by some at five minutes and by others at ten, no estimate exceeded or fell short of these limits.

The exciting effects first produced by the chloroform, though considerable were not as great as have often been observed by us in persons of similar temperament, this patient being of a sanguine temperament and of a stout built muscular frame.

Dissection, twenty-four hours after death.—Face less livid than before death. The limbs very rigid.

Head.—The vessels of the dura mater and surface of the brain presented no remarkable degree of congestion. The substance of the brain did not differ in appearance from what is observed in persons dying in full health.

Thorax.—No fluid was found in either pleural cavity, extensive old adhesions united the right lung to the walls of the chest.

Both *lungs* were very considerably congested, of a dark color, and exuded a large quantity of frothy bloody serum from their cut surfaces. The pericardium contained half-an ounce of limpid serum. The heart was full-sized and rather large. The deposit of fat upon its surface was not in unusual proportion. The heart itself was flabby and all its cavities, both ventricles and auricles, literally empty. The substance of the left ventricle was rather softer than natural and yielded more readily than ordinary under pressure of the finger. No coagula were met with in any of the vessels.

Abdomen.—The viscera of the abdomen presented no marks of congestion or other appearances worthy of note. The brain and lungs when cut emitted an odor regarded by some persons present as aromatic, by others as that of chloroform. This was the case with the lungs in a more decided degree than the brain.

Remarks.—There appeared to be nothing in the case of this patient to forbid the use of chloroform. The trial that had already been made of it was followed by no unpleasant consequences nor did it during inhalation produce any immediate effect that excited alarm, the patient showed no reluctance to its use, on the contrary he was anxious to have it administered in both instances. The mode of administration permitted a free admixture of atmospheric air and the quantity used the second time did not exeeed three drachms, and of this there was necessarily a considerable portion wasted. The day preceding a larger quantity had been administered from the same vial to another patient and for at least twenty-five minutes without the slightest bad effect. During this time a luxation of the hip was reduced, a compound fracture of the os brachii explored and a fragment of bone removed, the patient being unconscious of suffering.

The chloroform on being submitted to analysis by Professor Reid, was found to contain nine per cent. of alcohol.

PART SECOND.

CRITICAL ANALYSIS.

Art. X.—*A Treatise on Etherization in Childbirth, illustrated by five hundred and eighty-one cases.* By Walter Channing, M. D., Professor of Midwifery, etc., in the University of Cambridge. Boston: W. D. Ticknor & Company. 1848. 8vo., pp. 400.

No single event in the history of modern therapeutics has so powerfully and so extensively roused the professional mind as the discovery of the anæsthetic power of ether inhalation. Nor is this to be wondered at; for this remarkable discovery was not merely the supplying of the pharmacopœia with a new agent, a new means of fulfilling a well-known indication; the end was as new as the means, the effect as novel as the cause which produced it.

The discoverer and early enthusiastic advocates of the new remedy, or rather of the new practice, claimed that by it surgical operations were to be robbed of all their pain, and of course nearly of all their terror. And soon, by its introduction into obstetric practice, we were assured that the *primal curse* pronounced on woman was to be removed, she was no longer "in sorrow to bring forth children."

Such claims as these were, when first Rumor made us aware of their existence, rejected without consideration, from their mere extravagance; but soon, and long before its application to midwifery, we heard with surprise that the new agent had passed from the hands of dentists, and that the pride of New-England surgery, the illustrious Warren, with a zeal and mental independence as characteristic as it is creditable, had subjected the new agent to the test of his enlightened experience, and found that it had the powers claimed for it and could be used with safety.

And here we will pause for a moment to pay a well-deserved tribute to Dr. Warren and his associates for their enlightened liberality in thus admitting the new practice to the benefit of fair trial. How easy would it have been for them to have turned their backs upon "*the dentist's discovery*," to have talked of "pain being physiological," etc., etc.; but theirs was a different, a far better spirit; they subjected the new practice to careful trial, and having done so, are enabled to give their opinions, not as the mere "guess-work of the imagination," but as scientific opinions ought to be given, inductions from extended observation. The result is familiar to all readers, everywhere the discovery was hailed with admiration and surprise, and everywhere, in our own country and in Europe, surgeons hasted to put to trial the new, the wonderful practice. We have said everywhere, but there is an exception to this statement, and one so very curious that it deserves to be noted, if only as a *psychological phenomenon ;* we believe few trials have been made of the new practice in Philadelphia ; the surgeons generally and obstetricians universally of that great metropolis, having resolved not to try the new practice, to "have neither part nor lot in the matter." Is this very remarkable unanimity a credit to the docility, or an imputation on the independence of professional mind ? Elsewhere the case was different, and though little more than two years have elapsed since the first trial by Warren, at the Massachusetts General Hospital, we have now in journals, pamphlets, and more elaborate treatises, reports from hundreds of surgeons and obstetricians who have made trial of the new practice ; we have also, what is only second in value to these results of experience, reports from some of the leading physiologists of Europe, of series of well devised and carefully executed experiments on lower animals, made to settle the question—How does this new agent act ? What part of the nervous system does it first effect, and in what order are the other parts brought under its influence ? Thus should it be—thus may it ever be ; let the profession be ever ready to receive improvement from whatever quarter it come, subject it to rigid scrutiny and then appreciate its value.

The means of forming a true estimate of the safety and value, or rather of the safety, for that being given, the objections to its value, whether they come in the shape of references to the Hebrew Bible, or in that of Bavardage, about depriving a fellow creature at an important moment of the control of his mind, will signify nothing with scientific men. The means, then, of appreciating the safety of etherization are multiplying every day, and to them Dr. Channing has made a most important and acceptable addition in his treatise. Our readers will remember that about two years ago, Dr. Channing published in a pamphlet a report of a few cases which he had then attended, in which ether was given. The treatise before us, was at first intended as an amplification of the pamphlet, but like many such things, it grew upon his hands till now we have an octavo of four hundred pages, containing, not only Dr. Channing's own cases, but reports from various physicians in Boston and its vicinity, a history of the ether discovery, references to the fatal cases in surgery, besides a vast deal of matter "*de omnibus rebus et quebusdam aliis,*" which the learned professor would have done well to omit.

Of this work we will now give our readers as good an idea as our limits will allow, but at the outset we must enter our protest against the manner in which it is brought out ; we do this with regret, because the frank manner in which the author confesses his literary sins, and attributes them to the true cause, a pressure of professional engagements, might almost disarm censure ; but duty to the reading part of the profession compels us not to admit these excuses. A few—a very few days of labor on the author's part, would have saved each one of his readers several hours in the study of this book, and as we hope the number of his readers will be counted by hundreds, if not by thousands, Dr. Channing will readily see how much of other people's time he has wasted while saving his own. The balance is fearfully against him; then the example—and from a Professor of the University of Cambridge! But we say no more, sorry to have been obliged to say so much.

The first chapter contains an account of the plan and object of the work, but into this is incorporated so much of what is afterwards presented in an amplified form, that it may almost be considered as a brief of the book. His object he declares is to settle, so far as it was possible, the question of the safety of etherization. *Is it safe?* This is the great, the dominant question; and Dr. Channing proceeds to argue this point and to notice some of the objections to its use. Here two letters from Professor Meigs are introduced, one to Simpson of Edinburgh, which, having been published in the Examiner, our readers may have seen; the other, to Dr. Channing, is of course new. Dr. Meigs, as our readers are aware, has never used ether or chloroform, his motives being (in his own words,)" *connected with* or *rather dependent upon my views of the nature and offices of the different parts of the brain.*" Again. "I should hardly yield my opinions to the force of statistical returns, because I have no doubt of some physiological, and therefore needful and useful connection of the pain and the powers of parturition." Well may Dr. Channing say in his comment upon these letters, "transcendental physiology and visionary teachings should not be allowed to touch the question." By the way, in one of these letters the following phrase occurs: "should I exhibit the remedy for pain to a thousand patients in labor, merely to prevent the physiological pain, and for no other reason, and if I should destroy only one of these, I should feel disposed *to clothe me in sackcloth and cast ashes on my head for the remainder of my days.*" Clothe me in sackcloth! Cast ashes on my head! Phoh! Now in all earnestness and with entire respect we ask, why will not Professor Meigs consent to communicate his opinions to his professional brethren without offending their good taste by such ridiculous flourishes of school-boy rhetoric as this.

But to return to Dr. Channing—he replies very courteously to the arguments of Dr. M. and other objectors and then proceeds to his second chapter on the discovery and use of etherization; here there is nothing very new. We will also pass over the two following chapters on the physiological agencies of ether and on the production, signs, etc., of etherization, and the treatment of its abnormal effects. We then come to a chapter on the objections to etherization in childbirth. These are, 1st. Labor is not so painful as to require it. This objection Professor Channing refers, very properly, to the parties who bear, not the doctors who witness the sufferings. What their verdict would be, can very readily be anticipated. 2d objection. Etherization is not certain and may be unsafe. To this Dr. Channing appeals to facts. Facts prove that it is certain, and the object of this treatise is to answer to its safety. 3d. The religious objection. This is so paltry that we were at first sorry that Dr. C. had noticed it, but as it gives him an opportunity to introduce an admirable letter from Professor Noyes of Cambridge, we cease to regret the space this matter occupies. 4th. Moral objection—it may be abused, and it may injure the child. Such objections as these do not detain Dr.

C. long, and need not our readers. We now come to the true pith and marrow of the treatise—the cases—eighty-seven are given in more or less detail and with remarks. Next we have three tables, No. 1, of 516 cases of natural labor—in 358 ether, and in 158 chloroform was given. No. 2, of 28 cases of non-natural labor seen by Dr. Channing. No. 3—24 cases non-natural, for which Dr. C. is indebted to friends who communicated them. Of these cases all those in the first table terminated favorably for the mother, in none were any unfavorable effects of ether noted and of the 46 physicians in whose practice they occurred, thirty-six gave an opinion decidedly and unequivocally favorable to etherization—and of the remainder almost every one speaks favorably with restriction as to purity of the article, selection of case, etc. etc, Here then is an array of facts and opinions founded on facts which the profession will know how to value.

Of the second and third tables, Dr. Channing presents an analysis. They comprehend twenty forceps cases in which all the mothers and fifteen of the children were saved. Four craniotomy cases, mothers all saved. Ten cases of convulsions, six mothers and three children saved. Nine arm presentations, all the mothers and six children saved. Three breech cases—mothers and children saved. One of accidental and two of unavoidable hemorrhage—mothers saved—one child lost. Two twin cases—mothers and children saved. Here we have fifty-one cases of non-natural labor, comprehending a large proportion of the worst variety of cases, and yet only four mothers are lost and these all by convulsions. Thirty-two children are saved, nineteen lost. Dr. Channing does not overstate his case when he says, " The records of medicine do not present such an amount of safety—so many and such perfectly successful results in operative, preternatural and complicated labor as are shown here to have followed etherization." Dr. C. dwells particularly on the advantage of etherization in arm presentions.

The rest of his book is made up of extracts from his correspondence and contains letters from Professor Ware, Bigelow, Drs. Homans, Pierson and many others, giving their experience and opinions. We extract a few lines from the letter of Professor Bigelow that we may say " ditto " to that enlightened physician. Of etherization in childbirth he says, " An experiment not yet settled in all its bearings, but promising much for the relief of human suffering." We now take our leave of Dr. Channing with hearty thanks for the valuable mass of information he has collected. If he has not settled the vexed question he has undoubtedly given facts enough to justify and in our opinion to demand from the profession further trials—a continued use of anæsthetic agents.

That the end proposed to be gained by these means is of great importance few will deny ; few experienced obstetricians will doubt that in not a few cases the pain of labor and that inflicted by obstetric operations, especially turning and removal of adherent placenta, is not only a very great present evil, but that it renders convalescence uncertain and protracted. If, without great danger to life, this pain can be mitigated or controlled, great will be the benefit thereby conferred upon woman. That anæsthetics will do this cannot be positively asserted, but that they may do it, every humane mind must ardently hope and devoutly pray.

C. R. G.

ART. XI.—*The Transactions of the American Medical Association, instituted* 1847. Vol. I. Philadelphia: Published by the Association. pp. 403. (Continued from page 80.)

REPORT OF THE COMMITTEE ON PRACTICAL MEDICINE.

[In our last number there appeared an analysis of the report of the committee on "Surgery," including that on "Anæsthetic Agents;" at the commencement of which we promised the readers of the Journal, that there should appear in this, analyses of the reports on "Practical Medicine" and "Medical Literature." To fulfil this promise, it will be necessary to deviate from the order in which the reports appear in the volume. In our next we hope to be able to lay before them, notices of the remainder of the reports contained in the transactions.—ED. *N. Y. Med. Jour.*]

The Report on Practical Medicine is the product of the pen of the eminent Professor of Practice in the College of Physicians and Surgeons of this city. Though limited in extent, it is, as might have been expected, from the able hand to which its compilation was entrusted, highly satisfactory.

Upon the first branch of inquiry intrusted to the committee, that of reporting on the more important improvements effected in this country in the management of individual diseases, the committee is enabled to report neither fully nor satisfactorily. But little, it is justly observed, can be expected to be effected in the limited space of one year. The journals contain, indeed, many suggestions, some hypothetical, others mere modifications of those methods of treatment which have preceded them: indicating indeed, zeal, talent, industry, and research; but not entitled to especial confidence or distinction. One only, and that an application of the surgical art to the treatment of a disease strictly medical, and as such presented through this committee to the notice of the Association, is the plan suggested by Dr. G. Buck of the New-York Hospital, of and for scarifying the affected parts in œdematous laryngitis, highly creditable to the ingenious operator and distinguished surgeon, whose memoir, ably drawn up and illustrated, is contained in the Transactions, (B. I.) it is elsewhere noticed, (see page 70.) The plan offers a valuable addition to our means of treating this formidable disease.

In considering the subject of epidemic maladies, these are arranged by the author of the report, under the three heads many years ago adopted by him in his erudite essay upon the Philosophy of Epidemics, a work which for elegance of style and profundity of conception, research and importance, has had no successor, and must ever hold a very high place in our domestic literature. These are, *contagious, infectious,* and *meteoratious.* They are defined by one of those well ascertained laws enunciated. No well characterized meteoratious epidemic, it is said, has, during the time of service of the committee, appeared in this New World. The contagious exanthemata seem to have been gradually declining in this city since 1837, and in 1847, the deaths by the three great varieties, smallpox, measles, and scarlatina, were only 473. From data given, Dr. S. infers that there is reason to apprehend, that when these shall have further declined or ceased, yellow fever will reäppear epidemically in our great northern emporium and the neighboring cities.

From the ravages of epidemic yellow fever, one of the infectious class, our country, with the exception of the cities of New-Orleans, Lafayette, and Mobile, has been exempt during 1847. During the time that this disease was prevalent in the former city, there were but few deaths from the contagious exanthemata, facts conformable to the general laws governing the prevalence of those diseases to which allusion has just been made. But of all the forms of infectious diseases, the one from which the greatest amount of mortality has occurred in most of the larger Atlantic cities of the New-England and Middle states, is typhus.

On examining the records of deaths from this disease for the last 35 years, in the city of New-York, it is found that the disease was epidemic in that period 4 times; in 1818, 1827–28, 1837, and 1846–7. The deaths in 1847 reached the frightful sum of 1396, while in 1846, they numbered only 256. The reporter infers from these facts, and doubtless correctly, that the *diffusion* of typhus is favored by certain periodical meteoratious influences. But the immediate cause of the prevalence of typhus among us during the last year, however much aërial influences may have contributed to the diffusion of the materies morbi and propagation of the disease, was more tangible than this. It consisted in the arrival in our harbor of over 100,000 emigrants, from Great Britain and Europe in 1847. Many of these came, under circumstances of distress, mental and bodily, excellently calculated to engender the typhus *idio-miasm*, in a close steerage in over-crowded ships, on board of which the disease broke out and was raging on arrival. It is not remarkable then that the typhus spread in the hospitals which were provided for their reception, among physicians, nurses and patients; nor that in the city many cases occurred in the apartments occupied by the lower classes of Germans and Irish, who had sheltered their friends. The number of persons admitted into the Marine Hospital at Staten Island, in 1847, was 6932; of this number 5277 were sick with fever, 1662 died. 2229 cases were registered typhus, of which 457 died, and 3020 as remittent and typhus remittent, (many of them ship-fever cases,) of which 205 died. The total number of deaths from typhus at the Quarantine Hospital and within the city of New-York, was scarcely less than 2000. The committee declines entering into the question of the contagiousness or non-contagiousness of typhus, and in the report, it is looked upon as an infectious disease, according to the definition previously given by its learned author.

We regret to be unable to coincide with him in his peculiar views on this subject, but like the unwieldy Athelstane, feel just now no disposition to arm ourselves and oppose our own feeble arguments to those of so doughty a champion as Prof. Smith. We hope that we may enjoy this pleasure ere long, upon another occasion.

With pleasure, however, we observe that in an opinion we have elsewhere defended, that, of the identity of typhus and the typhoid fever, we have the support of Dr. S.'s powerful arm; and it is with not a little pride that we notice that the little periodical which we then edited, and in which the results of our lucubrations are consigned, has furnished the committee with some materials, from which to draw their conclusions. The opinions therein set forth by the writer, in opposition to the views of Bartlett and others, are fully maintained by Prof. S., and may now, we think, be considered as the established sentiment of the profession.

In the paper before us, the committee proceeds to inquire: 1st, Whether these diseases (typhus and typhoid fever,) differ so much in their symptomatology, as to enable us to characterize them as distinct distempers.

Secondly, whether the morbid anatomy, and particularly the intestinal follicular lesions observed after death, indicate the diseases to be specifically different?

The result of a careful analysis of the symtomatology of the two forms of disease, is, according to the committee, that, so far as it generally enables to form a judgment, they are the same. Speaking of the lenticular, rose-colored eruption, it is declared, and as we are convinced, truly, that there is in regard to the size, color, situation and time of appearance of the eruption, nothing remarkable in the one which is not equally so in the other. The remark is reiterated which we made in our review of Dr. Bartlett's labors on this subject, in the Annalist, vol. 2d, that "the eruption in typhus, though among the characteristics of the disorder, is variable in size and color: *sometimes it is of a rose hue,* but frequently violet or purple: at one time persistent under pressure, and at another evanescent." In the undoubted ship typhus in the New-York Hospital in 1840, and subsequently, "the eruption did, in no respect, differ from that which occurs in typhoid fever." It is sometimes wanting in cases of typhus, in cases where the glands of Peyer are extensively diseased. We are pleased to notice that the reports of the New-York Pathological Society, as published in the journal alluded to, are pressed into the service as furnishing evidence upon this interesting point of inquiry. The reporter asks, "are not the rose-colored spots of the typhoid fever the primary forms and conditions of the petechiæ or maculæ of typhus?" He believes so, and we coincide with him; the testimony of Professor Clark is also adduced to the same purport. He says that "in the proportion of about one-half the typhus fever patients, *a rose-colored* eruption occurs on the body, which frequently, in the progress of the fever, *assumes* a petechial appearance." Diarrhœa, gurgling, tympanites, epistaxis, etc., which have been invoked to aid in constituting these as diseases, "radically and essentially different in nature," are most briefly examined into and dismissed as insufficient to establish the diagnosis.

In typhus and the typhoid fever of Louis, the morbid phenomena are so correspondent in the sensorial, vascular and other functions, are so similarly catenated or related to one another from their accession to their termination, that the attempt to assert and group them, so as to make them express two different diseases, is a labor which, it appears to us, must fail to show any distinction which is found in nature and cognizable by practical minds.

Relatively to the morbid anatomy of typhus and typhoid fever, the committee declare "that in the strict meaning of the term as assigned by Louis, disease of the glands of Peyer and Brunner, is in none of its forms *an anatomical characteristic* of any one species of fever," being met with in disorders, unlike in their causes and dissimilar in their character, the infectious fevers, and also now and then the contagious exanthemata, in genuine typhus and in typhoid or adynamic febrile maladies. They maintain that there is no solid reason for considering the affection of Peyer's glands a feature distinguishing the typhoid fever of Louis from the typhus of other countries. In no given case of fever during life can it be determined with certainty, that the glands of Peyer are diseased. *Dothenterite* occurs in genuine typhus, while, with typhoid fever, the follicular disease of the bowels is sometimes wanting. The committee has demonstrated the truth of these positions by copious citations from the British and European authorities, and of some of the facts which have been adduced by our own, in favor of the opinion.

The conclusion to which the committee in this concise but very able report have arrived, is that which we have ourselves, some time since, announced as our deliberate conviction, and with this additional testimony to its accuracy, cannot, we think, fail to become soon the general sentiment of the profession on the subject. "In view of the facts which have been stated, it seems to the committee that no reasonable doubt can remain that typhus and typhoid fever are identical." Of this, the able summary of the question presented by the reporter can leave, we think, but little remaining hesitation.

In concluding this hasty notice of the report, we cannot forego expressing our approbation of the elegance, perspicuity, learning and logical accuracy which it displays, which are the well-known characteristics of its distinguished author, "*qui nil tangit quodam ornat.*" He has done his part nobly, but he alone has done his part. Had his colleagues toiled equally hard in obedience to the behests and interests of the Association and the profession, many points necessarily unalluded to would have received notice and elucidation, and a fuller, if not an abler report, would have been the result. W. C. R.

REPORT OF THE COMMITTEE ON MEDICAL LITERATURE.

The Constitution of the American Medical Association define the duties of the Committee on Medical Literature to be, that of preparing an "Annual Report on the general character of the periodical medical publications of the United States, in reference to the more important articles therein presented to the profession, on original American publications, on medical compilations and compends by American writers, on American reprints of Foreign medical works, and on all such measures as may be deemed advisable for encouraging and maintaining a national literature of our own."

It appears that in order to carry out the instructions contained in the latter part of the above extract, and also to lighten the "duties of those who should succeed them in after years," the committee, of whom Dr. Oliver W. Holmes was chairman, thought best, in the first part of the report, "to take a summary retrospect of what has been done in the several branches under their consideration, before proceeding to examine the more recent labors in the same department." By so doing, the committee have taken upon them a self-imposed task, the proper or improper execution of which is fraught with great good or evil to our national medical literature, and as a consequence, our national medical reputation.

It has been said that we have no literature of our own—that the almost sole literary occupation of American physicians consists in editing, with notes and emendations, the productions of foreign physicians. How far the judicious execution of the self-imposed task of the committee might have served to refute this charge, it may, perhaps, be difficult to show. The plea which the committee urge for any imperfections which that portion of the report relating to our own periodical literature, may contain, viz., "that the materials within reach of the committee were by no means complete," will not be recognised or taken into consideration by those who make or believe in the correctness of the charge above alluded to, or who read the transactions abroad. This report has gone forth to the medical profession of the whole world as a summary of the medical literature of this country; and reaching, as it must, a goodly number of the profession of this country, and, to say the least, the medical journals of Europe generally, it is a matter of no small importance that a good account of our doings should go forth. How far this is accomplished in the present report we will now proceed to examine.

The report commences with an account of the "*Periodical Medical Publications of the United States,*" in which it is correctly said, that "the plan of the first medical periodical publication which appeared in this country, was conceived by Dr. Elihu H. Smith, of New-York. He associated in his enterprise Dr. Edward Miller and Dr. Samuel L. Mitchell, and in August, 1797, the first number of the new journal appeared, under the name of the *New-York Medical Repository.* In the hands of different editors it continued to be published for many years, until it reached its twenty-third volume."

After this follows a short eulogy of its originator, and a very slight and imperfect allusion to its contents and character. "As doing justice to the pioneer journal of the western hemisphere," it does not to us, and will not, we are inclined to believe, by the profession, be considered as a fair and creditable statement of the journal of which Dr. Thatcher thus spoke—"The commencement of this publication undoubtedly forms an era in the literary and medical history of our country. No work of a similar kind had ever appeared in the United States. Its influence in exciting and recording medical inquiries, and in improving medical science, soon became apparent. It led to the establishment of other and similar works in different parts of our own country, as well as of Europe; and may thus, with great truth, be said to have contributed more largely than any other single publication to that taste for medical investigation and improvement, which has been, for a number of years, so conspicuously and rapidly advancing on this side of the Atlantic."

Nor is this all. In the short account given of its contents, we learn, for the first time, "that a letter from Dr. Stevens (not Dr. Stearns) in its eleventh volume, introduced to the world the wonderful properties of ergot." This, to the fame of Dr. Stearns, all must admit, is a serious matter—a mistake which cannot be easily rectified—and one which, to the reputation and honor of the American medical profession, is of more importance than the awarding of "new honors" to the names of Louis or John Hunter.

The report now goes on to state, that the publication of this journal was followed, in a few years, by that of *The Philadelphia Medical and*

Physical Journal, (1804). After which no mention is made of the name or character of any other, until that of the American Medical and Philosophical Register, (New-York, 1810,) during which time there appeared *The Philadelphia Medical Museum,* (1805); *Baltimore Medical and Physical Recorder,* (1808); and *The New-York Medical and Philosophical Journal and Review,* (1809); all of which, if we except the second named, passed through a longer and more successful career than the one mentioned by the committee. After the American Medical and Phlosophical Register, is noticed *The Eclectic Repertory,* (not "*Repository,*") (Philadelphia, 1811,) and following this, *The New-England Journal of Medicine and Surgery,* (1812). No mention is made of the Baltimore Medical and Philosopical Lyceum, (1811). Next in the order of date was the American Medical Recorder, established in 1818 and continued until 1829. A very short notice only of a small part of its contents is taken. *The Philadelphia Journal of the Medical and Physical Sciences,* is mentioned as having appeared in 1820, and a very good summary of its principal articles is given. The same cannot, however, be said of the notice taken of *The New-York Medical and Physical Journal,* (1822,) a work containing an unusually large number of valuable original communications. In the interval which occurred between the commencement of this work and that of *The North American Medical and Surgical Journal,* 1826, there appeared *The Western Quarterly Medical Reporter,* (*Cincinnati,* 1822,) *The Hartford Analectic Journal of Medicine and Surgery,* (1823,) *The Boston Medical Intelligencer,* (1823,) *The Medical Review and Analectic Journal,* (Philadelphia, 1824,) *The New-York Monthly Chronicle of Medicine and Surgery,* (1824,) and *The Carolina Journal of Medicine, Science and Agriculture,* (Charleston, 1825,) six in all, not one of which are, by name even, mentioned in the report. With the notice of the North American Medical and Surgical Journal, the committee closes the enumeration of the defunct periodical medical publications: why they should pass by without the slightest notice the following publications, which appeared after this, it is difficult to say: *The New-York Medical Journal,* (1830,) *North American Archives of Medical and Surgical Science,* (Baltimore, 1835,) *The Eclectic Journal of Medicine,* (Philadelphia, 1836,) *American Medical Intelligencer,* (Philadelphia, 1837,) *The United States Medical and Surgical Journal, The Maryland Medical and Surgical Journal, The New-York Journal of Medicine and Surgery,* (1839,) *The New-York Lancet,* (1842,) *The Bulletin of Medical Science,* (1843.) Neither is there any mention made of those exceedingly valuable papers contained in the early volumes of the Transactions of the American Philosophical Society—an excellent summary of which may be found in the New-York Medical and Physical Journal, vol. 6th, pp. 399, 568. The necessity for the notice of the foregoing, and of other journals which the country may have furnished, will be found in the fact that no where else could such notice be taken with so much propriety and service. Many of them contain exceedingly able papers—papers which have served to build up the reputation of their authors in this country as well as Europe. And above all, it appears from the fact that to this report medical men will look for a *complete* synopsis of our national medical literature.

Following the enumeration of the early periodical publications is found a list of all the journals with which the committee are acquainted, now published in this country, which list we subjoin: "The only quarterly publication devoted to medical subjects generally, is the *American Journal of Medical Sciences*, (Philadelphia). Those published every two months, are the *New-York Journal of Medicine*, the *Charleston Medical Journal and Review*, the *New-Orleans Medical and Surgical Journal*, and the *Western Lancet*, (Cincinnati). The monthly journals are the *Buffalo Medical Journal*, the *Medical Examiner*, (Philadelphia,) the *Illinois and Indiana Medical and Surgical Journal*, (Chicago,) the *Missouri Medical and Surgical Journal*, (St. Louis,) the *St. Louis Medical and Surgical Journal*, the *Western Journal of Medicine and Surgery*, the *Southern Medical and Surgical Journal*, (Augusta, Georgia,) the *Medical News and Library*, (Philadelphia,) and the *South-western Medical Advocate*, (Memphis). Two weekly journals are published, the *Boston Medical and Surgical Journal*, and the *Annalist*, at New-York, to which must be added a small sheet called the *Journal of Health*, published in Boston. *The New-Jersey Medical Reporter and Transactions of the New-Jersey Medical Society*, is the title of a periodical published at Burlington, N. J., the first number of which appeared in October last, and which is promised to be continued quarterly. In addition to the publications just enumerated, there are the *American Journal of Insanity*, (Utica,) the *American Journal of Pharmacy*, (Philadelphia,) and the *American Journal and Library of Dental Science*, (Baltimore); each of which is a prominent representation of the department to which it is devoted."

In connection with the subject of periodical literature, the notice of reports and transactions of various societies and public institutions is introduced. Mention is made of *The Summary of the Transactions of the College of Physicians of Philadelphia*, *The Transactions of the Medical Society of the State of New-York*, and those of the *Massachusetts Medical Society;* after which the committee proceed to a brief enumeration of the more important articles contained in the medical periodicals of the country. The execution of this task has been, we are pleased to say, accomplished with credit to the committee, and honor to our medical literature.

In the execution of the second division of their task, viz., that of reporting on the general character of American medical publications, on medical compilations and compends by American writers, on American reprints of foreign medical works, etc., the committee followed the same retrospective plan instituted in the first. "For the sake of convenience, these works have been arranged under general heads, the first place being usually given to original productions and compilations by American authors, the second to translations from other languages, and the third to reprints of books written or translated elsewhere."

The summary character of this portion of the report forbids an analysis of its contents. We shall, therefore, pass on to that portion which speaks of the character and tendencies of American medical literature. Before doing so, however, it may be as well to correct one or two mistakes into which the committee have fallen relating to publications of medical works. In speaking of eruptive fevers, the committee say, that "the only foreign work on the eruptive fevers which has been republished, as far as the committee are aware, is that of Dr. Gregory, consisting of his lectures delivered at St. Thomas' Hospital." The lectures of Dr. Gregory, it is well known, have been announced as being in press for some time, but as yet they have not made their appearance. We sincerely hope ere long to see them in an American dress, with additions from the practical pen of the gentleman who has them in charge.

In mentioning the work of Willis and Bird on urinary diseases, which were published some years since, the promised work of Dr. Clymer is mentioned as having been published. These, although small mistakes, mar somewhat the accuracy of the report.

In alluding to the fact that at the present time some twenty or more medical journals are in existence, the committee assert that "some principle in addition to the wants of the reading community, must exist to account for such inordinate fecundity in this particular department. This," say they, "is to be found in the homely fact, that a medical journal is a convenient ally and advertising medium for public institutions and publishing establishments, and that by the *help yourself* system so generally established, it is not necessarily much harder to edit a medical journal than to furnish the "notes and additions" to the work of a British author."

"Not necessarily much harder to edit a medical journal than to furnish the 'notes and additions' to the work of a British author"! Certainly the chairman of the committee on medical literature cannot be acquainted with the amount of mental toil and labor which devolve upon the editor of a medical journal, or else he would not have put forth this assertion more especially in face of the following statistics, which he furnishes when speaking of the amount of labor bestowed by editors of foreign works republished in this country: "The following calculation of the proportion added to different recently-published works, taken at random, will show the average amount of material so contributed. The editor's proportion was, in two instances, one-fourth; in two more, one-eighth; in one, one-ninth; in another, one-tenth; in others, one-fifteenth, one-seventeeth, one-nineteenth, one-twentieth, one-twenty-eighth, one-fifty-ninth, one-sixty-fifth, one-ninetieth, one hundred and seventh, and, in one instance, such a sprinkling as a single penful of ink might furnish, and leave enough to spare for a flourishing autograph."

The limits which we had marked out for this will not allow of a farther notice of this portion of it—neither do we think it necessary. The value or reputation of the American medical periodical press will not, we feel certain, be much injured by such statements as the foregoing. They carry with them their antidote.

In marking out the course which must be pursued in order to remedy the evils which grow out of the "great *forte* of American medical scholarship, which has hitherto consisted in '*editing*' the works of British authors"—"the habit of indolence generated by the easy acquisition of a foreign literature, which seems to answer every necessary purpose"—"and the habit of negligence which springs from the curious fact of a constant parallelism, which is not identity, in most natural objects and phenomena of the new world, with something of the olden continent," the committee state that "the American constitution must be studied by itself—it differs from the European in outline, in proportions, in the obvious characters of the skin and hair—why should it not differ in the susceptibilities which, awakened, become disease? The American climate remoulds the European, and casts a new die of humanity—will it not generate causes of disease different from those of the Old World? Over this virgin soil a new Flora is weaving her long web of tapestry, flowing from the lichens of Katahdin to the myrtles of Cape Sable; is there no undiscovered healing in any of its leafy and blossoming folds? Here is the true field for the American medical intellect; not to set English portraits of disease in American frames; not to trust for immortality to a little more or less of manual adroitness or questionable hardihood; but to coöperate with that fast-gathering band of students who, in other departments of science, are studying what nature has done with her American elements, and teach us what disease is here, how it is generated, and what kindly antidotes have been sown in the same furrows with its fatal seeds." Here, certainly, is a vast field for labor. A field which may well and honorably be occupied by the best talent of the profession. But has there nothing been done in this field? Does not the American medical periodical literature furnish ample evidence that not a few of the members of our profession have devoted themselves to a consideration of the very subjects mentioned in the foregoing extract? Does not the New-York Medical Repository, the New-England Journal of Medicine and Surgery, the Philadelphia Journal of the Medical and Physical Sciences, the American Medical Recorder, the American Journal of the Medical Sciences, and, in fact, all our home periodicals, furnish conclusive evidence of the zeal and untiring industry of the profession in pursuing the same track marked out by the committee? Nor is this all. Are not the works of Rush, Currie, Barton, Bigelow, Hosack, Thatcher, Gallup, Eberle, North, Hale, Smith, Chapman, Jackson, Forry, Bartlett, Dickson, Harrison, Wood, etc., etc., valuable mementoes of the interest which has been and is still felt in these very subjects?

In closing their report, "the committee are not prepared to propose to the Association any special organized mode of operation for encouraging and maintaining a national literature of our own." This, perhaps, was and ever will be impossible; and, in the language which closes the report, it may be truly said, that "it is by indirect means rather than by direct contrivances, that this desirable object is to be promoted; by elevating the standard of education; by the stern exclusion of unworthy articles from medical journals; by the substitution of original for parasitical authorship; and by introducing such a tone of general scholarship and scientific cultivation that the finer class of intellects may be drawn towards the ranks of the medical profession."

In conclusion, it may perhaps be urged as an apology for the omissions contained in this report, that neither the time nor space allowed the committee would admit of a more complete notice of the early medical productions of this country. If such were the case, would it not have been advisable for the committee to have reported progress and asked for an extension of the time? Or, if this was by them deemed not practicable, would it not have been best to have omitted altogether that portion which treats of the early medical periodicals so sparingly noticed? So, at least, it seems to us, and so, we fear, many of the profession will feel, who read it, in the Transactions, and are best conversant with the earlier literature of the United States.

BIBLIOGRAPHICAL NOTICES.

Art. XII.—*Lectures on Venereal and other Diseases, arising from Sexual Intercourse, delivered in the Summer of* 1847, *at the Hôpital Du Midie, Paris.* By M. Ricord. Reported and translated by Victor De Meric, M. D., M. R. S. E. Philadelphia: Ed. Barrington & George D. Haswell, 1849. 12mo., pp. 298.

Another emanation from the prolific brain of the great pioneer in the field of syphilitic investigation, M. Ricord. The little work before us contains a complete resumé of all the modern doctrines in relation to venereal diseases, their origin, pathology, mode of propagation, prognosis and treatment. Our author's name is so intimately connected with all the new and valuable discoveries in this department of scientific research, that few who desire full and thorough acquaintance with the subject in question, will fail to make his opinions and arguments themes of study and sober reflection. The present lectures, clinical in their character, and appearing in a condensed form, seem to fill the hiatus which the profession at large have for some years felt. The original treatise of M. Ricord, published in 1842, was for the most part a philosophical work, having for its main object the application of the doctrine of inoculation, in the diagnosis of the various maladies denominated syphilitic. Its practical details were meagre in the extreme. His later and more extensive work, embellished by beautiful and life-like illustrations, was so expensive as to be beyond the reach of a vast majority of the profession. The volume now under consideration is so eminently practical, so concise, and yet embodying all the more modern discoveries and methods of treatment, that it will be found a most invaluable aid and guide to the student in the treatment of this class of affections.

A synopsis of the contents will place before the reader a view of the number and importance of the subjects treated. It is divided into 28 Lectures, as follows: Blenorrhagia and Chancre. Blenorrhagia; History, Localities, Causes, Symptoms, Progress, Duration, Complication, Diagnosis, Prognosis, Prophylaxis. Treatment of Blenorrhagia; Operations for Phymosis and Paraphymosis. Urethral Blenorrhagia, Treatment of Blenorrhagia. M. Ricord's Defence of the New Doctrine. Blenorrhagic Affection of the Testis. Vaginal Blenorrhagia. Treatment of Blenorrhagic Ophthalmia. Phenomena resulting from the Inoculation of Virulent Matter. Duration and Progress of the Syphilitic period, Phagedenic and Indurated Chancre. Urethral and Anal Chancres, Prognosis. Treatment of Chancre, Prophylaxis, Abortive and Subsequent Treatment. Treatment of Phagedenic Ulcerations, Bubo. Prognosis of Bubo, Treatment; Constitutional Syphilis, Hereditary. Continuation of Hereditary Syphilis; Mechanism of the Infection; Premonitory Symptoms, Eruptions, etc.; Mucous Papules or Condylomata. Secondary Eruption, General characters and differential Diagnosis. Syphilitic Iritis, Onychia, Affections of Mucous Membranes. Treatment of Secondary Syphilis, Action of Mercury, Anti-Mercurial Medication, Doses, etc. Tertiary Symptoms, Sarcocele. Treatment of Syphilitic Sarcocele, Tertiary Muscular Affections, Elastic Tumors, Lesions of the Fibrous and Osseous Tissues. Nodes, Syphilitic Exostosis, Ostitis, Caries and Necrosis. Tertiary Affections of the Lacrymal apparatus, Treatment of Tertiary Symptoms. Treatment of Nodes; General recapitulation. Formulary of Medicines.

We cannot withhold our commendation of the masterly manner in which these subjects are discussed. Speculation and theory gives place to sound practical precepts, and invaluable suggestions for treatment. The limits of our remarks will not allow quotations sufficiently extensive to exhibit the scope and tenor of the work. One or two brief extracts upon the more intricate points in the philosophy of Syphilis must suffice. Upon the vexed question of Hereditary Syphilis, our author remarks:

"We all know that the transmission of the disease from parents to children is an undeniable fact; but it is nevertheless oftentimes very difficult to reäscend to the actual source of the mischief when both the de jure father and mother are quite free from any syphilitic accident; there is no choice left in cases of this description, and we are driven to suspect that a third party has been concerned." * * * *

Supposing a female to be fecundated by an affected agency, how will *she* be affected by carrying a poisoned fœtus? According to certain well-observed facts we may infer that the mother can receive the germs of the disease from her child, so that in such a case she suffers from the syphilitic infection by the instrumentality of the fœtus in utero. It had hitherto been believed that the mother received the infection directly from the father, and that she transmitted to her offspring the diathesis with which she became imbued; but this never happens except the mother has been subjected to the contagion of *primary sores*, and she herself had had an indurated chancre, as well as secondary symptoms consequent upon such chancre. I am ready to acknowledge that a woman may give birth to an infected child without experiencing any inconvenience herself; the father, in such a case, transmits the poison by reason of the secondary symptoms which are upon him at the time. If he had had *primary* symptoms he would have diseased the mother direct, and the effect may still have reached the child."

And again he remarks: "Remember that there is no such thing as an infection of the child by the mother, she having been contaminated by the father; but that, as I have said before, the father procreates an infected child, which may then propagate the secondary poison to the mother; for where there are no children the mother does not suffer. But the mother to conceive whilst herself and the father are quite free from the syphilitic diathesis, and that this diathesis happens subsequently to arise with the father, can it be transmitted to the child?

"I do not hesitate in answering this question in the negative, and I must look upon that opinion as very absurd, which supposes that the father can contaminate the child through the membranes. In order that a child, the offspring of healthy parents, should be at all infected after it has existed more or less time in utero, the mother must, by direct inoculation, become affected with an indurated chancre, and all its consequences; then the fœtus may inherit the diathesis of the mother."

In conclusion, we regard the work as one which will commend itself to the profession as the most concise and able exposition of the doctrines of syphilis. The translation is remarkable for the boldness and vigor of its style, and the typographical execution is equally creditable to the publishers. H. M. G.

ART. XIII.—*A Manual of Physiology.* By WILLIAM SENHOUSE KIRKES, M. D., assisted by JAMES PAGET, Lecturer on General Anatomy and Physiology at St. Bartholomew's Hospital. With one hundred and eighteen illustrations on wood. Philadelphia: Lea and Blanchard, 1848, 12mo., pp. 552.

THIS is an exact reprint without alterations or additions, of the text of an English work. The large size and great expense of "Müller's Elements of Physiology," has rendered it unavailable for the general use of students. With the intention of meeting their wants, it was announced some time since in London, that a volume would soon appear containing a reduction of its contents—one which should be more nearly proportionate to the share of time which can be devoted to physiology, as one of the branches of medical science, studied during the period of pupilage.

The present work is in part the fulfilment of that announcement, many of its chapters, viz., those on *Motion, Voice* and *Speech*, the *Senses, Generation* and *Development*, are chiefly abstracts of corresponding portions of that work and of the supplement by Drs. Baley and Kirkes. The progress of physiology during the last few years has been such that it was found necessary, by the authors, to deviate from the announced plan in regard to the remaining portions of the work and thus we have now laid before us a text book which in all respects appears to be well adapted to the use of students. In its preface we are informed that "in writing this work the primary object has been to give such an account of the facts and generally admitted principles of physiology as may be conveniently consulted by any engaged in the study of the science; and, more especially, such a one as the student may most advantageously use during his attendance upon lectures and in preparing for examinations." From the perusal which we have given this little volume, we are inclined to the belief that the object of its authors has been fully accomplished, and that a more convenient and useful volume cannot be found for the use of the student. In perusing some of the chapters, particularly that on the "*Vital Properties of the Organs and Tissues of the Human Body*" and the one on "*Generation* and *Development*," we were forcibly struck with the amount of information condensed in so small a compass. This to the student is a great desideratum, and one not to be found in the more voluminous works. We can most cheerfully recommend this volume to both student and practitioner as eminently calculated to subserve their wants. The engravings and typographical execution of the volume is good; items which add much to its value. We thank the publishers for the republication of it, and sincerely hope that the profession will prize the work.

Art. XIV.—*The Nature and Treatment of Deafness and Diseases of the Ear; and the Treatment of the Deaf and Dumb.* By William Dufton, M. R. C. S. Philadelphia: Lea and Blanchard. 1848. 12mo., pp. 120.

There are probably no diseases in which the profession at large manifest so little interest and in the treatment of which they show so much empiricism as in the diseases of the ear. Often have we seen active internal inflammation allowed to go on without any such thing as a correspondingly active treatment having been pursued, until complete destruction of the tympanum has taken place, followed by the discharge of pus, which, for the first time, seriously arrested the attention of the medical attendant. Such, however, should not be the case, our attention should be arrested by any unusual complaint made in reference to the diseases of the ear and a careful watch instituted, active treatment should at once be adopted when acute pain deep in the ear first manifests itself. That the auditory passages are extremely complicated in their structure all admit—that their diseases are obscure and not easily diagnosticated in many instances is equally certain, and from these facts alone the conclusion may be correctly drawn, that whatever tends to throw any information on the obscurities of aural surgery should at once be laid before the profession.

The work before us lays no claim to new inventions or discoveries but is a plain statement of its author's knowledge and practice in the treatment of the diseases of the ear. It is divided into four chapters. The first treats of the "*Acute and Chronic Inflammation of the Ear.*" In this chapter both external and internal inflammation is treated of. The second, "*Those Diseases of the Ear not Purely Inflammatory,*" in this chapter are included accumulation of hardened cerumen, herpetic ulcerations, foreign bodies in the meatus, worms and insects in the ear, and fungous excrescences and polypi. Chapter third is devoted to a consideration of the "*Nervous Diseases of the Ear,*" in which is mentioned erythismus and torpor. Chapter fourth closes the volume; it is devoted to some observations on the "*Deaf and Dumb.*" Through the work are scattered several interesting cases which illustrate important principles either in the pathology or treatment of the diseases of the ear. We have read the work with interest and profit.

Art. XV.—*An Illustrated System of Human Anatomy, Special, General and Microscopic.* By Samuel George Morton, M. D., Penn. and Edinb., Member of the Medical Societies of Philadelphia, New-York. Boston, Edinburgh and Stockholm. Author of "Crania Americana," "Crania Ægyptiaca," etc., etc. With three hundred and ninety-one engravings on wood. Philadelphia: Grigg, Elliot & Co. 1849. Royal 8vo., pp. 642.

We do not remember, in our short editorial career, when a more splendid volume has been laid before us than this. The great advances made in microscopic anatomy, histology, or the science of tissues, has rendered it necessary that a work on the anatomy of the human body should contain a careful summary of its truths. "It has already banished a legion of venerable conjectures, and substituted simple truth for vague hypothesis; and by unravelling the very germs of organized and organizable matter, has taught us the origin and development of the tissues, together with a portion at least of their hitherto doubtful functions." All the well-ascertained facts relating to this department which are necessary for the student to understand are here posted up, and we know of no volume where this information can be obtained in so condensed form. So much of the elementary principles of physiology as cannot be separated from anatomy, we perceive, are here contained—every day blends more intimately these two sciences together, and if we mistake not, the time will soon come when the student of the one must equally well understand the facts and truths of the other. Dr. Morton has here shown himself thoroughly acquainted with the progress of anatomical research, and we feel assured that the untiring zeal which he has manifested in all departments of our noble science is no where more conspicuous than in this. Of this much we are certain, that the truly honorable desire which he has "to be enrolled among the expositors of a science which has occupied many of the best years of his life," will be fully realized, (if not at present it will surely be in coming time.)

This volume is printed on *excellent* paper, and the illustrations on wood are perfect specimens of the art. We freely recommend it to the whole profession, particularly students, who, we are certain, will not fail at once to recognise the superior merits of this book—a thorough knowledge of which will lay the foundations of anatomical science, without which they cannot be successful or scientific practitioners, deep in their memories. We shall call attention to this volume again in a future number; mean time we would say to all, purchase it.

Art. XVI.—*Observations on the Pathology of Croup, with Remarks on its Treatment by Topical Medication.* By Horace Green, A. M., M. D.,etc. etc. New-York and London: John Wiley. 1849. 12mo., pp. 115.

Our space will only admit of a passing notice of these "Observations" at the present time—in a future number we shall call attention to it, and then enter fully into a consideration of the doctrines therein contained. On the present occasion we can only say that the typographical execution of the work is excellent, the paper is neat and no pains have been spared by the publishers to render it an attractive volume. The distinctive features which characterize the work are the author's views in relation to the strict pathological anatomy of croup and its treatment by topical applications made directly to the parts diseased.

Art. XVII.—*Summary of the Transactions of the College of Physicians, Philadelphia.* (From September 6th, 1848, to January 2d, 1849, inclusive,) pp. 46.

Transactions of the Medical Association of Southern Central New-York, convened at Ithaca, June, 1848, pp. 16.

The summary of the transactions of the College of Physicians of Philadelphia contains the yearly report on the "Theory and Practice of Medicine," by Dr. Choates—the annual report on Midwifery, by Dr. Griscom—an obituary notice of the late Henry Neill, M. D.—various discussions on reports of cases and on Anæsthesia—portions of which may be found contained in our American Retrospect in this number.

The Transactions of the Medical Association of Southern Central New-York, bear good evidence of the determination of the profession in that section of this state, to husband all their resources for mutual improvement. The Transactions contain, beside the regular business of organization, discussions on various subjects—reports of cases—an essay on lumbar abscess, by Dr. Hyde—and a report on the epidemic dysentery which has been so fatal in certain portions of the northern and eastern States. Portions of this report we will endeavor to give our readers in our next. The following is a list of the officers of the Association, *President,* Miles Goodyear, M. D., of Cortland. *Vice Presidents,* E. L. Hart, M. D., of Elmira, Silas West, M. D., of Binghamton. *Recording Secretary,* Charles E. Washburn, M. D., of Binghamton. *Assistant Recording Secretary,* James H. Jerome, M. D., of Trumansburgh. *Corresponding Secretary,* Caleb Greene, M. D., of Homer. *Treasurer,* S. H. French, M. D., of Lisle.

ART. XVIII.—*Transactions of the New-York State Agricultural Society, with an Abstract of the Proceedings of the County Agricultural Societies.* Vol. 7, 1847. Albany: 1848, 8vo., pp. 799.

THIS volume we intended to have noticed in our last number, circumstances beyond our control prevented us from so doing. It contains a large number of valuable papers, which, to many *will* and to all *ought* to prove interesting, one particularly has attracted our attention. It is the address of A. H. Stevens, M. D., President of the College of Physicians and Surgeons, on the FOOD of PLANTS. Originality of thought, applying of recent discoveries in chemistry to the growth and development of plants, and an earnest desire to see science in all its branches fostered and encouraged, characterize this address. Several new views are here for the first time developed to the world. A synopsis of which we would most gladly present to our readers, but our limited space at present will not admit of it.

PART THIRD.

EDITORIAL

AND

AMERICAN MEDICAL RETROSPECT.

Progress of Cholera in the United States.—Since the date of our last editorial, more authentic information has come to hand in regard to the progress of this disease in the South and South-western States. In this city there has no new case occurred since the one on the 20th of December, and at the quarantine station, (S. I.,) none since January 4th. At New-Orleans the disease has prevailed to a great extent. On the 12th of December, 1848, the ship Swanton, from Havre, arrived at this place with two cases on board. When she left Havre the passengers and crew were all in good health, and there was no cholera in that port, but some of the passengers were from Germany, where the cholera was raging. When about two weeks at sea the disease broke out, and in the course of a few days seventeen persons died and were thrown overboard. On her arrival at New-Orleans there were two cases on board, and they were, on the 12th, taken into the Charity Hospital The following day several cases appeared about the shipping and in the vicinity of the wharves. The disease continued now to spread rapidly, and yet notwithstanding this, the Board of Health reported that the disease then occurring was an aggravated form of cholera morbus. On the 23d, however, they reported the disease to be true cholera, and declared it to prevail in an epidemic form. The following is said to be an official statement of the number of fatal cases up to Jan. 5th, 1849. (We extract only a part of it):

> "For the week ending December 16th, 17 deaths; from the 16th to 21st, 87; on the 22d, 46; 24th, 84; 25th, 77; 27th, 61; 28th, 92; 29th, 84; 31st, 71; January 2, 84; January 4, 39; January 5, 44. Whole number of deaths from Cholera, from the 11th of Dec. to the 5th of January, inclusive, 1,115."

Since this time the disease has been gradually disappearing. On 6th, the deaths were 38. And on the 8th the Board of Health reported the disease "rapidly disappearing and no longer epidemic." On the 16th there were 15 deaths. On the 22d there were but four, and the Board of Health had discontinued making their daily reports. On the 7th of February the city was said to be free from this dreadful scourge.

From New-Orleans it extended in different directions. Many cases occurred on the upward bound boats. And on the 24th of December, it is reported that several cases had occurred at Vicksburg. On the same day, it is said that a patient with the disease died at Cincinnati. Another on the 24th, from which time it gradually increased, and on the second of January, 1849, there were six deaths. It does not appear that the disease became at all epidemic in this place, for on the 7th there were but four deaths. And on the 10th the city was reported to be free from the disease.

During the time of its prevalence at New-Orleans and Cincinnati, cases continued to occur on board the steamboats plying on the river; such also was the case in the several cities intermediate between these two places. On the 8th of January, at Memphis, it was reported that the average number of deaths per day was ten. Six cases were reported in St. Louis on the 17th of January; and on the 24th, the Board of Health reported 17 cases as having occurred through the week. It is said that the disease has also appeared at Mobile and Montgomery, and that at the former place there were 13 deaths during the week ending the 3d of January. It has also made its appearance in Texas, in as severe a form as in New-Orleans. At Fort Lawson, the 8th Infantry have suffered horribly; forty deaths occurred in one night.

The treatment found most successful by Dr. Whiting, in the disease at the quarantine station, (S. I.,) was "calomel in scruple doses, combined with opium and camphor, followed, at two or three hours' interval, by small doses of calomel, until reaction is indicated by some action of the liver. This plan, combined with the faithful application of heat externally, etc., I am satisfied has proved of most advantage in the cases which have come under my notice." At a later period in the disease, it is said that five grains of calomel, with a quarter of a grain of morphia, is at first given to an adult; in half an hour or one hour a scruple dose of calomel is exhibited, and is usually retained. Afterwards a pill of cal. grs. 5, sulph. morphine, gr. ¼, is given every one, two, or three hours, as the symptoms may indicate. "In eight cases, large doses of calomel, capsicum, and camphor, as proposed by Dr. Cartwright, were carefully tried, combined with the rubbing in of hot tincture of capsicum. But the result did not encourage the continuation of the treatment." "Chloroform has been administered in a number of cases, carefully and repeatedly, and at first gave some hope that it would prove a successful remedy, but no other permanent good has resulted from its use but to relieve the spasms and cramps." In this disease, as it has appeared here, "there has been but one stage—that of collapse. Although every pains have been taken to detect the first deviations from health, directions given to all to communicate them at once, and persons appointed to inspect them constantly, and a physician to pass among them at all hours of the day and night, the first intimations were the extreme symptoms, defying the most powerful and decided remedies." The average duration of the disease in adults was ten hours—in children four. The appearances after death were "a shrunk and shrivelled livid exterior, a gorged and congested condition of the internal organs. The meninges and substance of the brain, and all its vessels, unusually red, either from actual congestion or the retention of the *cruror* of the blood, while the serum is drawn off. The lungs, liver, spleen, heart, intestines, and kidneys, presented the same deepened color. The mucous lining of the bronchial tubes was much congested."

In New-Orleans, Dr. Wederstrandt, of the Charity Hospital, says:—"The disease here seems to consist of three stages in most cases: first, a feeling of malaise and diarrhœa; next comes on the vomiting and purging of rice-water discharges, and cramps; thirdly, the cold stage, with the clammy sweat and suppression of urine. The intelligence remains intact until very late. The disease has proved fatal here in so short a time as three hours. Oftener it is protracted to twelve and fifteen, and rarely beyond twenty-four hours. The violence of the pain in the stomach, and vomiting and purging, does not always afford a criterion for an unfavorable prognosis, for many patients recover rapidly in a few hours after being so attacked, declaring themselves nearly as well as ever. About half an hour after death, the body, which was as cold as ice just before, becomes as warm as in health; and the cramps or contractions of the muscles, which annoyed the patient so much during life, continue for at least half an hour, and in some cases nearly an hour after death. We treat the disease on general principles, and according to the indications of each individual case. In the early stage, we have had reason to be satisfied with the preparations of opium and counter-irritants. Some physicians use a large dose of opium and quinine in the beginning, when they get their cases early; they give from thirty to forty drops, and a drachm of tincture of opium, with half a drachm of quinine, for a single dose, and speak highly of their success. In a few cases I have thought that the practice did good, but I have not used it to any great extent. When brought to us, which they generally are, in the cold stage, we use stimulants externally and internally, with nourishing broths, and several have re-acted under this treatment, and finally recovered. Males and females, young and old, are alike subjects for this disease; but far more men than women are attacked. We have seen many children die of it, some under five years, and a few old people at a very advanced age."

Such appears to be, (so far as we have been able to gather them,) some of the particulars of the progress and treatment of this dreadful disease, in this country, up to the present time. From the data furnished, it seems that the disease has appeared only in an epidemic form at New-Orleans and, *perhaps*, in Texas, (we say perhaps, for our data on this part of its history are particularly unsatisfactory.) Do not the facts thus far developed in its progress favor the idea that the disease was imported into this city by the ship New-York—into New-Orleans by the ship Swanton, and by steamboats from the latter place, transported to Cincinnati, and the intermediate places along the river. And above all, do they not seem to favor the doctrine of its *communicable* character?

New-York Academy of Medicine.—The regular annual meeting of the Academy of Medicine was held on the 3d, and an adjourned meeting on the

9th of January, 1849, at which the following officers and standing committees were elected to serve for the present year: *Pres.*, VALENTINE MOTT, M. D.; *Vice Pres.*, ISAAC WOOD, M. D., J. R. MANLEY, M. D., GALEN CARTER, M. D. and THOMAS COCK, M. D.; *Rec. Sec.*, J. L. VANDERVOORT, M. D.; *Assist. Sec.*, T. M. FRANKLIN, M. D.; *Dom. Cor. Sec.*, W. C. ROBERTS, M. D.; *For. Cor. Sec.*, JOHN G. ADAMS, M. D.; *Treas.*, J. O. POND, M. D.; *Lib.*, T. F. COCK, M. D.

Committee on Admissions, Drs. F. Campbell Stewart, Ed. L. Beadle, Wm. P. Buel, Gurdon Buck and O. S. Bartles.

Committee on Medical Ethics, Drs. J. W. Francis, J. R. Manley, Isaac Wood, A. H. Stevens and J. P. Batchelder.

Committee on Finance, Drs. A. C. Post, S. P. White, J. O. Stone, W. N. Blakeman and J. C. Bliss.

Committee on Publication, Drs. Jos. M. Smith, Wm. C. Roberts, H. D. Bulkley, S. T. Hubbard and M. L. Taft.

Executive Committee, Drs. Galen Carter, J. R. Van Kleek, Joel Foster, J. G. Adams and J. Anderson.

The installation of Prof. Mott as President of the Academy took place at the regular monthly meeting, Feb. 7, on which occasion he delivered his inaugural address. The subjects chosen were cholera and ship fever.

PHILADELPHIA MEDICAL EXAMINER.—The talented and accomplished editor of this journal, Prof. Robert M. Huston, has retired from the editorial charge of it, and is followed by Francis G. Smith, M. D., and David H. Tucker, M. D. Prof. Huston ever evinced an able yet ardent fervor in the management of this periodical while under his supervision. We wish him, in his retirement and devotion to "other imperative duties," a full realization of his most ardent wishes. In his "card" he states, that "the present editors are extensively and favorably known as teachers and authors; and as the editorial labors will be divided, the task to them individually will be less onerous, whilst the interest of the journal will be promoted by the increased attention they will be able to bestow upon it." We cordially extend to them the welcome of our editorial hand, and sincerely hope that they will find their new duties less onerous than we wot ours to be.

SOUTHERN MEDICAL AND SURGICAL JOURNAL.—We regret to learn, that there are hanging over this valuable journal, doubts of its continuance after the present year. The cause assigned by its able editor in the January number, is the want of a sufficient patronage to pay for its publication. Prof. Eve, in the announcement from which we gather our information says, "with every effort to discharge our whole duty as editor, and after every appeal on the part of the publisher, *only three hundred subscribers have paid* for the Journal for the year 1848. This, too, with payments demanded in advance. If this be the result of the *cash* system, what would have been the result of the *credit?* The publisher, therefore, distinctly declares, he cannot continue the publication of the work at a positive pecuniary loss to himself. The editor has never asked, never expected, and has never received one cent from the subscription for his labor in conducting the Journal." Certainly, this is plain talk, and we ardently hope it may have the effect desired.

PATHOLOGY AND PRACTICAL MEDICINE.

Iodine an Antidote to the Venom of the Rattle-Snake. By James Whitmire, M. D., (*North-Western Med. and Surg. Jour.*)—Dr. W., in the communication from which this is condensed, states that he has used the tincture of iodine in bites of the rattle-snake, viper and copper-head, on both man and beast, with complete success. His manner of using it is to paint the part that is bitten, and so far as the swelling extends, with three or four coats of tinct. (pharmaceutical strength) twice daily; and should the swelling extend, which it almost always does after the first application, if made any time soon after the infliction of the wound, it should be followed up with the paint. By the time the third application is made, the tumefaction will cease to extend, and three or four more applications will generally restore the limb, or part affected, to its natural state, save perhaps an obtuse sensibility to the touch, owing probably to the cuticle being destroyed, and some soreness of the muscles, which will remain a longer or shorter period. A successful case is related in illustration of the efficacy of this mode of treatment.

Aneurism of the Aorta.—*Rupture within the Pericardium.* By C. L. Ford, M. D., (*Buffalo Med. Jour. for Feb.*)—The subject was a female, aged, perhaps, 50, rather fleshy, presenting nothing especially worthy of note except the following:—On removing the sternum and costal cartilages, the pericardium was observed to be very much distended. Section through it exposed a pint or more of coagulated blood, occupying a position in front, and at the right side of the heart. On examining for its source, I found a rupture of the ascending aorta two inches from its origin. The rent was perpendicularly in the artery, nearly straight, and three-fourths of an inch in length. Proceeding upwards, I found a very large aneurism, principally of the ascending aorta, though the arch, and descending aorta, were much above their normal size. The sac was nearly filled with coagulated blood. On removing this, and moderately distending the parts, I made the following measurement;—From the commencement of the aorta, around the greatest prominence of the sac, to the origin of the arteria innominata, 7½ inches. Circumference of the sac, 9½ in. Size of aorta close to a. innominata, 5 in. Size of aorta beyond left subclavian, 5½ in. Lower portion of thoracic aorta, 3¾ in. At origin of cœliac artery, 3½ in. At bifurcation into iliacs, 2½ in. Length of arteria innominata, 2 in. Circumference at origin, 3¾ in. Circumference an inch above, 3½ in. Origin of pulmonary artery, 4 inches.

The dilatation was mostly on the right side, and front of the ascending aorta. The surface was rough, apparently covered with fibrinous deposit. The descending vena cava adhered intimately to it. The pericardium adhered to the upper part of the sac, but the lower portion, where the rupture occurred, and some distance above it, had no such adventitious aid. The thickness of the walls varied little from the normal state, though in the immediate vicinity of the laceration, the coats were obviously thinner. The heart, though large, did not appear to be particularly diseased.

Croup or Laryngitis Membranacea.—*Treated with Nitrate of Silver.* By Dr. Clark, (*Amer. Jour. Med. Sci.*)—Dr. Clark has reported to the Boston Society for Medical Improvement, the condensed particulars of five cases treated in this manner—three recovered and two died.

Case I.—A boy two and a half years of age, who had been ill two or three days, and had had croupy respiration for thirty-six hours before he was seen. Cauterization was practised with some alleviation of suffering, but death ensued on the third day.

Case II.—A girl five years of age and of scrofulous diathesis. The croupy respiration was well marked, and had been present more than twenty-four hours. Cauterization was employed and much false membrane was expectorated at various intervals. Considerable relief was obtained in this way; but the child died on the fourth day, with symptoms of exhaustion rather than of suffocation.

Case III.—A delicate girl of three and a half years, who had sore throat with hoarseness. False membranes existed in patches on the tonsils, etc.; cauterization was employed. Croupy respiration, however, came on the next evening, but it was relieved in twelve hours, by the expectoration of small fragments of false membrane streaked with blood. The paroxysms of dyspnœa returned several times, being terminated in the same way, and the patient ultimately recovered, although the voice was not wholly restored for three weeks.

Case IV.—A child of four years. The symptoms in this case were not very severe, although quite distinct. The croupy breathing had continued without remission for twelve hours—false membranes were remarked in the throat. The treatment here was followed by gradual and speedy recovery, without the expulsion of any large amount of false membrane.

Case V.—The patient, a healthy girl of six years, was seen early in the disease, which lasted a fortnight. She had at first a sore throat and a febrile attack which disappeared the second day. The only symptom which persisted was a slight and increasing hoarseness, and patches of lymph were to be seen on the tonsils and spreading thence back toward the larynx. These increased until the whole throat was invested with a coating of the lymph and the croupy respiration had supervened. The caustic was regularly applied from the beginning, and the expectoration of the membrane began almost as soon as the breathing became much embarrassed. The paroxysms of distress and the intervals of relief followed each other in this way for nearly three days, when the respiration slowly assumed its natural character. The voice could not be raised above a whisper for several days later.

No medicine but Dover's powder was given, and this was repeated often enough to keep the patient constantly under its influence. The caustic was of the strength of xl. grs. to ℥j. of water, and was used with the small curved probang. The expectorated membranes were exhibited.

Dr. Robertson, in the Charleston Medical Journal and Review, for January, 1849, has reported two cases successfully treated by the same method.

The first case occurred in a boy of ten years of age, of nervous-sanguine temperament, with florid complexion, to whom I was called on the morning of the 5th of November, 1848. His family were peculiarly liable to anginous affections. In fact, several of his brothers and sisters had been carried off, very suddenly, by diptheritic inflammation supervening in scarlatina. When I saw him, his cough was croupy, and respiration oppressed, with much difficulty in deglutition, and great complaint of soreness of the throat when the effort was made. On examining the throat, I found the tonsils swollen and inflamed, and exhibiting several small patches of albuminous deposit, and the entire fauces and soft palate presenting an inflamed appearance, and looking as though they had been coated with milk and water. I immediately used a solution of the crystals of nitrate of silver, 40 grs. to the ounce of water; not only applying it freely to the tonsils, fauces and epiglottis, but carrying the sponge into the cavity of the larynx itself. A violent fit of coughing ensued, followed by vomiting, by which a considerable quantity of viscid, tenacious mucus was thrown off, accompanied with shreds of concrete albumen. From the sensation complained of by the patient, I have no doubt the solution reached the vocal chords, as the sponge was thoroughly saturated with the solution. The cough and unpleasant symptoms were decidedly relieved by the application, and no injurious effects whatever followed the introduction of the caustic into the larynx. An emetic of ipecac. and sulphate of zinc was given in the course of an hour, which brought away a large quantity of viscid mucus, with flocculi of a membranous character. The emetic was followed, in the course of the evening, with mercurials, and revulsives to the exterior of the throat. The next morning the inflammation of the tonsils and fauces had nearly subsided, the characteristic sound of the cough had disappeared and no traces of the peculiar exudation could be seen on the tonsils or fauces. The subsequent treatment consisted in stimulating gargles, and confinement to the bed and a comfortable room for a few days. I forgot to mention that on the first day, the attack was accompanied with considerable fever, which gave way, readily, under the treatment adopted after the application of the caustic.

The second case occurred in a girl, of delicate constitution, about eleven years of age, on the 14th of November, 1848. She had been laboring under considerable fever for forty-eight hours before I saw her. The tonsils were very much inflamed and swollen, with several patches of concrete exudation. The fauces did not present the milky appearance as in the first case, and, although there was no croupy cough, yet the voice and hoarseness showed that the inflammation extended into the larynx. I applied the solution of the crystals of nitrate of silver, of the same strength, and in the same manner as in the preceding case. When the sponge was withdrawn from the larynx, I found it completely encircled by a large portion of tough, tenacious mucus, elastic and about the consistence of jelly. All the unpleasant symptoms, as in the first case, were relieved; and, although the febrile symptoms continued longer, the treatment was the same, with the like fortunate result.

A New Treatment of Catarrh. By J. A. Lockwood, M.D., U. S. Navy.—(*Amer. Jour. Med. Sci.*)—For nearly a year I have pursued a plan of treatment in catarrh, which, in numerous instances, unfailingly relieved its initial symptoms almost immediately. It is adapted to its earliest stages, when the mucous lining of the nasal cavities is dry, tumid and red, accompanied with a feeling of heat, fulness, and itching of the part.

The remedy consists in the application of a solution of nitrate of silver to the Schneiderian membrane. It is best applied with a camel's hair pencil. The strength of the solution should not be less than eight grains of the salt to one ounce of the distilled water. I ordinarily employ a solution somewhat stronger —ten grains to the ounce.

The application is not painful, nor even disagreeable. Its immediate effect is to excite a copious serous effusion, which continues for some minutes. After this the nostrils are freed from the previous impediment to the passage of the breath through them, when the sensation of relief becomes at once manifest. With the subsidence of the local swelling, the general heaviness and *malaise* disappear. For some minutes, the inhalation of cold air communicates to the mucous lining of the nose a feeling of rawness. This, however, is of short duration, after which, unless the inflammation has extended beyond the Schneiderian membrane, the cure is complete.

To accomplish a radical cure, the solution should be applied at the very commencement of the attack. When the inflammation has extended to the pharynx, etc., it is no longer practicable to subject all the parts affected to a treatment which is mainly local. I have, however, applied the remedy in many cases where the disease had made several days' progress. Then, although no expectations were entertained of removing any symptoms of bronchial irritation which might have supervened, the relief to the head was always satisfactory, by the liberty it afforded to the passage of air through the nostrils.

M. Deschamps, in the *Gazette des Hôpitaux* for October, 1847, recommends snuffing up the nostrils every two hours a solution of opium in water, as an effectual cure for coryza. This method I have not tried. Before reading an account of it, I had for several months employed the solution of nitrate of silver with such happy results, that I was indisposed to seek for any better plan. The insufflation of ardent spirits will often check an incipient catarrh, but the remedy is unpleasant and painful.

TREATMENT OF CHOLERA. By Prof. HARRISON.—The following is taken from the Western Lancet, for February, being a portion of a clinical lecture on this disease.

Treatment in the Precursive Stage.

First.—Employ the following tonic mixture, three times a day, in tea-spoonful doses, mixed with a wine-glass of cold water:—℞. Sulph. quinine, ℈ij., ether sulphuric, ℥ss., spts. camphor, ℥iss.—Mix.

Second.—Carefully watch the state of the stomach and bowels. If sickness of the stomach comes on, and especially of looseness of the bowels, then no time is to be lost in applying for medical advice. But if there be no opportunity of immediately consulting a judicious physician, and the diarrhœa be slight, the following prescription may be usefully taken—and this, with a strict regulation of the diet, and avoidance of fatigue, will prove available for an arrest of this symptom of the precursory period of the complaint. ℞. Tinct. opii., ʒij., ess. ppt., ʒj., ess. cinnamon, ʒj., chloroform, ℈ij., syrup tolu., ℥ij.—A tea-spoonful every two hours till the diarrhœa is checked. Or six or eight drops of laudanum with thirty drops of the spts. of camphor, in a little water, will perhaps answer. Should the diarrhœa prove obstinate, and especially should there be an absence of bile in the evacuations, then the formula given below is to be used.

Treatment in the Invasive Stage, or when the Premonitory Symptoms are Present.

First.—Nausea, or vomiting; or diarrhœa, particularly of a thin rice-water material, or cramps, denote, when either, and especially when more than one is experienced, that the cholerine, or commencement of the cholera, is upon the patient. *Second.*—If plethora exists, blood-letting has proved eminently serviceable. *Third.*—Take of the following pills every two hours till the diarrhœa is checked. ℞. Sugar of lead, ℈j., opium, gr. vi., cayenne pepper, ℈j., camphor, ℈ss., calomel, ℈j.—Mix. Divide into six pills. *Fourth.*—If the patient has lately partaken of any article of diet, then give a table-spoonful of powdered mustard and the same quantity of common salt, in a tumbler of warm water. *Fifth.*—Apply a large warm mush poultice all over the abdomen, and spread over the poultice, before its application, a thick layer of strong powdered mustard. *Sixth.*—If the patient grow worse, then employ the following:—℞. G. camphor, ℥j., cayenne pepper, ℥ss., pow. mustard, ℥j., spts. turpentine, ℥vj.—Mix. To be rubbed over the entire surface of the body. And the following:—℞. Ether sulphuric, ℥j., spts. camphor, ℥ij., spts. ammonia, ℥ss., brandy, ℥xij.—Mix. A table-spoonful, with an equal quantity of cold water every hour. This last mixture is to be used after symptoms of collapse set in, and, in conjunction with its exhibition, strong mercurial ointment mixed with camphor and cayenne pepper, are to be applied to the surface. Additional to these means, injections of ten grains of sugar of lead, dissolved in an ounce of starch or gum water, with a tea-spoonful of laudanum, should be administered every half hour.

Both the warm and cold bath have been employed in the collapsed stage. The sense of internal heat, transferred by morbid sympathy to the general surface, although the skin is greatly reduced in its natural temperature, urges the patient to throw off the bed-clothes, and to resist hot applications. The warm bath does not allay, but rather exacerbates this distress of the patient. Cold water applied in the way of affusion, has, at times, seemed to awaken reaction, by the sudden impulse which it imparts to the nervous system. The cold water is, when employed, to be dashed forcibly on the body, and immediately stimulating frictions are to be vigorously prosecuted. The few cases of recovery which I have witnessed, after a collapse has occurred, have been brought about by the establishment of the rapid mercurialization of the patient. And for the management of the low form of inflammation, which is so apt to succeed a severe attack of cholera, and which may be localized in the digestive tubes, or lungs, or brain, a carefully-conducted mercurial impression is the surest resource.

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Case of Hydrophobia Treated by Chloroform. By A. H. Brown, M. D.—(*Bost. Med. and Sur. Jour.*)—The patient, aged 18, was bitten by a dog on the 29th of July, 1848. The wound, which was considerable, was simply dressed by a physician soon after it was inflicted; neither excision of the part nor the application of the caustic were resorted to, and reunion rapidly took place. On the 5th of November following, the premonitory symptoms of the disease set in; these continued to increase, and on the third day the disease, with all its frightful accompaniments, was fully developed. On the evening of this day, chloroform was resorted to—the patient was easily brought under its influence, and so kept for the *entire night.* There was no return of the spasms, and nothing to indicate that a subtle and fatal poison was doing its terrible work. The following morning the supply of chloroform became exhausted, the patient soon became conscious. From this time the spasms returned, became frequent, and violent. In the course of the forenoon, a new supply of cloroform having been obtained, various ineffectual attempts were made to administer it, owing to the spasms excited by the cold which it produced from evaporation. At this time the cicatrix of the wound appeared inflamed. The following evening the patient was again brought under the influence of the chloroform, which was kept up for half an hour, and then gradually discontinued. There was no return of the spasms, and only slight efforts to move; his breathing and respiration resembled that of an apoplectic person. Towards the last, the discharges from the mouth became bloody. The whole amount of saliva and mucus discharged was estimated at eight or ten ounces. He continued in the state described till about 8 o'clock in the evening, when he quietly expired, 28 hours after the appearance of the first spasm, and 102 days after the wound was inflicted by the dog.

Post-mortem Examination.—The brain exhibited appearances of active congestion; the vessels of the membranes were crowded with blood, and as the substance of the brain itself was sliced off, numerous bleeding points quickly appeared; the spinal cord seemed to be healthy. The mucous membranes of the fauces, larynx, trachea, and bronchia, were intensely inflamed. It appeared as though a brush dipped in red paint had been drawn over the whole surface. Notwithstanding the abundant secretion of mucus and saliva, the parts, at the time of the examination, were quite dry. The epiglottis was considerably tumefied. No other abnormal appearances were observed.

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Discussion on Anæsthetic Agents.—The following interesting discussion which occurred in the stated meeting of the College of Physicians of Philadelphia, for January 2d, 1849, we extract from the "Summary of the Transactions."

CASE OF SUPPOSED HYDROPHOBIA.—Dr. Gibbons remarked, that a case of supposed hydrophobia occurring in a lady residing in Camden, N. J., and reported to have been cured by the use of chloroform, under the care of Professor Jackson, had been the subject of discussion at a recent meeting of the College;—as that gentleman was now present it would be interesting to the Fellows to hear from him an account of the case; which in every point of view must be considered as a most important one.

Professor Jackson replied, that it was his intention to present, at an early period, a history of the case referred to. He had always considered true rabies canina as an incurable disease, and he is not prepared to assert, positively, that the case in question was one of genuine rabies; there were many important features of that disease absent, and there is even no certainty that the dog, by which the patient was bitten, was mad. The lady had suffered, previously to her late attack, from severe nervous paroxysms, but one of these, however, had occurred since her marriage, seven years ago, and this took place four years since. He would describe the patient as physically but not mentally nervous. He would not enter now into further details, but when he presented to the College the history of the case, he would submit the reasons which incline him to believe it to have been one of rabies.

CURE OF EXTRAORDINARY NERVOUS DISEASE.—Dr. Bond related the particulars of an extraordinary nervous disease occurring in a female, which has been under his observation for the last eight years. The patient is unable to turn in bed herself, or to be turned by another, without an attack of convulsions being induced. These attacks are also produced by pressure upon the spine, even by drawing her clothes too tighly around her. About one year ago she was seized with a severe convulsive paroxysm, attended with intense pain, in consequence of which she had not slept for two nights. Dr. B. being sent for, directed her to inhale thirty drops of chloroform, which produced very prompt relief; the inhalation was then repeated with forty drops of the chloroform, when the patient became perfectly calm, her pulse being regular; and she remained so for about an hour. That night she passed, with what, in her case, might be termed very great comfort. Since that period the patient has used the chloroform daily; at first twice, and now three times in the twenty-four hours. She is still liable to convulsions when her position is changed, or pressure is made along the spine, even when under the influence of the chloroform, unless this is given in pretty strong doses. From her being forced to lie constantly upon one side, extensive excoriation of the hip has been produced. The use of the remedy is followed by some distress about the head, which continues for about one and a half or two hours; no other inconvenience has resulted from it. She now takes two ounces of the chloroform in three weeks.

Dr. Jackson, who saw this case, remarked, that he never witnessed more perfect tranquillity in any one, than was evinced by the patient whilst under the influence of the chloroform. When not under its influence she could not be moved, or changed, nor use the bed-pan without a paroxysm of convulsions being produced. Although the remedy exhibited no power to remove the cause upon which the convulsive paroxysms depend, still by suspending these while the patient is moved, it affords to her an amount of comfort which no other agent seems adapted to give.

CASE OF STRICTURE OF THE RECTUM.—*Remarkable Quantity of Chloroform used.*—Professor Jackson referred to the history of a case remarkable for the quantity of chloroform that was used. A lady laboring under a stricture of the upper portion of the rectum which prevented the flatus from passing, became, in consequence, the subject of an enormous distension of the abdomen, attended with so great a degree of sensitiveness that the use of palpation and percussion were entirely precluded, and her case was at first involved in no little obscurity.

In the latter part of the month of December, 1845, she was attacked by a violent convulsive paroxysm, preceded py a very peculiar spasmodic effection, consisting in a cracking of the head of the humerus in the glenoid cavity and of the femur in the acetabulum; these spasmodic symptoms continued for about fifteen minutes, when general convulsions set in, accompanied with intense pain. On the first of January, 1846, an attack of spasms occurred and continued for several hours; the urine was retained from a spasmodic affection of the neck of the bladder and urethra, the orifice of which latter was so much retracted that it was difficult to introduce a catheter to relieve the distension of the bladder. A few drops of chloroform were given to the patient to inhale, and prompt relief was experienced. The use of the chloroform was continued daily for two or three weeks, the quantity being gradually increased as the effects diminished. Dr. J. was sent for one morning and found the mother of the lady in great alarm in consequence of the quantity of the chloroform which her daughter had taken. She had inhaled two ounces in the course of the evening, then two ounces more, and an additional ounce in the course of the night; being five ounces inhaled from 5 o'clock, P. M. until 10 o'clock of the ensuing morning. Dr. J. found her with a feeble pulse, diminished temperature of the body, and considerable excitement of mind. She insisted upon having more of the ether to inhale. She remained cold and nearly pulseless for forty-eight hours, when all the effects of the inhalation disappeared, and, what is remarkable, since that time, she has had no return of her spasms. Upon one occasion having a tooth taken out, the pain of the operation caused a tendency to their return, but this went off without the spasms occurring.

CASE OF TRISMUS NASCENTIUM.—Dr. Bond related a case of trismus nascentium which occurred in the infant of a female who had been delivered after an easy labor without any medical attendant. When Dr. B. was called to the infant, it was a week old, and exhibited the symptoms of trismus well marked. He administered a mixture of chloroform and asafœtida internally, and the child recovered. How far this result was to be attributed to the chloroform, Dr. B. is not prepared to say, inasmuch as other remedies were employed at the same time. The bowels of the infant were much disordered and so soon as they were restored by an appropriate treatment to a healthy condition, the trismus began to disappear.

CASE OF NEURALGIA.—*Local Anæsthesia.*—Dr. Hays stated, that he had employed the chloroform to produce local anæsthesia with apparently the most happy effects, in a case of neuralgia, occurring in a gentleman fifty years of age, who had been for a long time a sufferer from neuralgia of the foot, in which all the remedies that had been previously employed failed to produce relief. Dr. H. was called to this patient about eight days since, and found him in intense pain, which had deprived him of sleep the whole of the preceding night. Dr. H. directed the affected parts to be enveloped with a pledget of lint or a few folds of muslin wet with chloroform, and the whole to be covered with a portion of oiled silk to prevent evaporation; on the next morning he found him entirely free from pain, which has not since returned. Whether the relief experienced in this case is to be ascribed to the local anæsthesia produced by the chloroform, or is to be considered as a mere coincidence, Dr. H. does not pretend to decide.

GOOD EFFECTS OF ANÆSTHESIA IN LABOR.—Dr. Parrish stated that a case of labor in which chloroform was used, had been communicated to him by his brother, Dr. Joseph Parrish, of Burlington, N. J. He was called a few days since to attend a case of protracted labor from rigidity of the os uteri, attended with severe ineffectual pains; he employed a mixture of ether and chloroform; almost immediately the parts became relaxed, and the labor proceeded with increased activity. The child was soon born and without any consciousness on the part of the mother. Dr. Griscom remarked, that he had employed ether inhalation, as remarked in the report read by him this evening, in two cases of labor. The first was a protracted, instrumental case; the female had been in labor twenty-four hours. There was great rigidity of the parts and dryness of the vagina. The patient was very intolerant of pain. As soon as she commenced inhaling the ether she pronounced herself as in heaven. There quickly took place a copious secretion of the vaginal mucus, and the child was soon delivered. The other case was one of natural labor, but attended with severe pains. The ether was administered at the patient's desire. She did not inhale a sufficient quantity to produce unconsciousness, but acknowledged very decided relief from its use. Dr. Hays called the attention of the Fellows to the very excellent paper of Dr. Burwell, on the use anæsthetic agents in labor, which appeared in a late number of the Buffalo Journal. The authority of this gentleman, he remarked, was very high, and his statements may be fully relied on. In some of the fifteen cases related by him, a state of unconsciousness was produced, while in others the consciousness of the patient was unimpaired, and yet the mitigation of the sufferings incident upon the labor was very decided. Dr. B. directs a plan for the administration of the anæsthetic agents, by which their effects may be graduated so as to obtain a mitigation of pain without inducing a state of unconsciousness. Dr. Page believed that there was great uncertainty as to the quantity of the ether or chloroform inhaled in any given case, and an impossibility of graduating the dose. A considerable portion of the ether escapes and becomes mixed with the air of the room; to such an extent sometimes as to affect those who breathe it; much also remains in the sponge which can never be entirely exhausted of the ether placed upon it. He has seen the mixture of ether and chloroform given in a case of labor attended with great rigidity of the parts, and severe pain, with the almost immediate effect of increasing the vaginal secretion, and relaxing the os uteri; allowing labor to go on while it caused a cessation of the pain. It is known that the inhalation of ether and chloroform increases the secretion from all the mucous surfaces; causing an increased discharge of saliva, of the mucus of the Schneiderian membrane, of the bronchial mucus, &c.; in consequence of which latter circumstance, its use is precluded in many operations in which sneezing or coughing would be highly embarrassing.

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NEPHRITIC COLIC.—*Chloroform Beneficial.*—Dr. Stillé stated, that last spring, Dr. Bowditch, of Boston, related to him a case of nephritic colic, occurring in an individual who had previously suffered from several attacks, in which the chloroform had been administered with the effect of inducing entire relief of the pain, without abolishing consciousness. The influence of the chloroform was kept up for several hours, when, at length, the stone passed through the ureter. Within the last three weeks a lady, about twenty years of age, after retiring to bed some hours, was attacked with violent pain in the region of the right kidney. About an hour afterwards (one o'clock, A. M.) Dr. Stillé was sent for. The mother had applied warm fomentations to the loins, and immersed the feet in a mustard bath. There was still intense pain, with tenderness over the region of the right kidney. The patient was lying bent double, her hands and feet were cold, her pulse feeble, and about sixty in a minute. The pain extended in the direction of the ureter; there was pain and a twitching motion of the right thigh, with frequent inclinations to urinate. From a review of the symptoms, Dr. S. considered the case to be one of nephritic cholic. The use of ether was suggested. A tea-spoonful was poured upon a handkerchief and inhaled for five minutes, when the patient fell asleep. In about fifteen minutes she was aroused by a return of the pain. The ether was again inhaled, and its impression was kept up for about an hour, without carrying it so far as to abolish consciousness; the pain ceased, the extremities became warm, and the pulse rose to seventy-five. The next morning there was no pain complained of, but considerable soreness was experienced when pressure was made over the right kidney. The pain did not return until two nights afterwards; when a larger dose of the ether was used, by the patient, without Dr. Stillé's presence or direction, but from some cause, it did not produce the same alleviation of the pain as before. At four o'clock in the morning Dr. S. saw her. The pain had by this time somewhat abated, and upon the administration of an opiate enema complete relief was procured. The pain has not since returned. No calculus was passed, so far at least, as could be ascertained.

ANALOGY BETWEEN THE EFFECTS OF ETHER INHALATION AND OPIUM.—Dr. Gibbons believed that we had overlooked the very great analogy there was between the effects of ether inhalations and opium. They both cause a cessation of pain without diminishing the expulsive action of the uterus, and this without necessarily inducing an abolition of consciousness. In abortions, when opium is exhibited, the fœtus is expelled without the patient experiencing a sensation of pain. From the favorable effects of opium in labors at the full term, he would infer the good effects of ether and chloroform. Given after delivery, the effects of opium is to render the recovery more favorable. To a combination of opium and camphor given at the termination of labors, he would almost ascribe the power of preventing the occurrence of puerperal fever. He has certainly never seen that disease occur in cases where he has given the combination referred to in a full dose. Dr. Jackson dissented from the suggestion of Dr. Gibbons, that large doses of opium and camphor are useful either during or after an ordinary case of labor. If the system of the parturient female is brought fully under the influence of opium, there would unquestionably be some danger that the speedy and complete contraction of the uterus would not take place, and consequently endanger the occurrence of flooding.

SURGERY.

ON THE EMPLOYMENT OF A NEW AGENT (Gutta Percha) IN THE TREATMENT OF STRICTURES OF THE URETHRA.—By H. J. BIGELOW, M. D.—(*Bost. Med. and Sur. Jour. for Feb.* 7.)—The advantages of gutta percha are, first, that it is probably the only material in the world capable of receiving an acute impression at a temperature quite comfortable to the skin, and at the same time of retaining it entirely, at about the actual temperature of the body; then becoming hard and resisting, besides being exceedingly tough, even in attenuated filaments. It follows, that upon being withdrawn from the urethra, it presents a perfect impression of the most minute inequalities of the callus against which it has impinged. In the second place, it may be used when thus moulded as a dilator of the stricture; and it can be made to enter with unerring certainty any of its orifices.

A few words will suffice to describe the method I have adopted in employing these bougies. A medium size answers a good purpose, unless there be strictures anterior to the one to be treated, in which case a small calibre is sometimes requisite. Let the bougie be oiled and the tip passed to and fro rapidly in the edge of the flame of a candle, until it is so warm that the nail will indent it; the mass will remain plastic after the surface has ceased to be hot, and may be rapidly passed down to the stricture, being very smooth and pliable. If it be pressed against the stricture for a minute with a force equivalent to an ounce or two of weight, and then left to cool during the succeeding three or four minutes, it will present, when slowly and carefully disengaged from the stricture, a firm and unyielding impression of the most minute inequality and indentations of the callous surface. The tip may be cut off and preserved, furnishing, with others, a complete history of the conformation of the stricture under treatment. If water be employed to heat the gum, it will be found that the steam from the surface will soften the rod for the length of an inch or more; rendering it liable to curl up against the stricture, as small elastic bougies are apt to do. The tip alone should be softened. On the other hand, care should be taken not to burn the gum; its texture and ability to harden are thus destroyed, and a piece may be left in the stricture. Such a case occurred to me. A plug was thus left in a small stricture, causing retention of urine during eighteen hours; when the orifice having become dilated. the plug was forced out by the urine; which then flowed more freely than for many months before.

Pure gutta percha softens most readily and cools with least elasticity and shrinking. It is therefore far better for impressions than when adulterated, as is common, with caoutchouc. But when pure, a little oiling and use soon raises a fur upon its surface; so that it is probable that some compound will answer better for mere bougies. I have hitherto made these rods from pure gum, of the thickness of sole leather, cut into square strips, plunged into boiling water, and rolled between two boards, care being taken to prevent twisting.

MAMMARY CANCER.—*Ulceration—Excision—Death.*—Dr. J. N. Batchelor, in the New-Orleans Medical and Surgical Journal for November, 1848, reports the particulars of a case of which the following is an abstract. There are points of *exceeding interest* in it. The patient, a Mrs. Low, received a blow on the right breast from the windlass of a well while drawing water. Five months after she discovered a tumor about the size of a hazle-nut, three-quarters of an inch to the right of the right nipple. She consulted a conjuror and for twenty weeks was under his care, at the end of this time the tumor involved the whole gland; it "extended from the lower portion of the gland to the coracoid process, and from the cartilages of the ribs to the axilla. It was 27 inches in circumference, rising upwards and outwards, forming an immense mass, larger than a child's head, with a slough upon the superior portion of some four or five inches in diameter with an irregular margin and near two inches in depth and very offensive. Her nervous system seemed much affected and she had had a good deal of hemorrhage from the sloughed portion which had materially weakened her. She complained of slight chills followed by fever at night, after which profuse perspiration came on. She suffered much pain in the tumor. A palliative treatment was instituted until the necessary apparatus could be obtained for the exhibition of "letheon." On examination, five days after, one half of the tumor had sloughed off, accompanied with considerable hemorrhage. She is now blanched and weak, pulse 170 and small, there is no enlargment of the glands perceptible through the system. "*She has a slight cough.*" She and her friends are anxious that an operation for its removal should be performed. During the inhalation of the ether and particularly when under its complete influence the pulse "increased almost beyond counting," "Owing to the diseased state of the integuments so large a portion was removed that the flaps could not be brought together by an inch and a half." After the operation she appeared a good deal exhausted, pulse 105, very small, skin blanched and covered with a clammy perspiration. "*Four ounces of ether were used during the operation*," and four hours after the operation the pulse was 165. When the wound had nearly closed the disease made its appearance "near the edge of the wound under the upper edge of the sternum and over the left clavicle in small subcutaneous tumors." She had recovered strength and flesh a little "*but still looked badly*." As soon as the wound closed "tumors made their appearance all over the upper portion of her body," and at her decease, which occurred a few weeks after the operation, the largest was in the left axilla and was near the "size of a child's head." There were in all near *forty* tumors to be seen. No post-mortem examination was made. [Surely this is conservative surgery with a vengeance.—Ed. *N. Y. Jour. Med.*]

LIGATURE OF THE LEFT SUBCLAVIAN ARTERY FOR SUBCLAVIAN ANEURISM. —*Remarkable Deviation of the Vessels and Consequent Change of Relations.*— By J. MASON WARREN, M. D.—(*Amer. Journ. Med. Sci.*)—This case presents several points of interest which deserve to be remembered, viz.: 1st. The fact that it is the first case which has proved successful where a ligature has been applied to the artery for an aneurismal tumor situated above the clavicle. All the aneurismal tumors operated for in this situation, have required the application of the ligature within the scaleni, and their terminations have in every instance been fatal. 2d. The anatomical peculiarities in the relations of the vessel, to which may be attributed the possibility of the ligature on the outside of the scaleni. 3d. The rapidity with which the collateral circulation was restored, the pulse having been felt at the wrist twenty-four hours after the operation. 4th. The length of time the ligature remained attached, *ninety days*, notwithstanding all safe means were made use of to detach it.

The following are the particulars of the case somewhat condensed:

Four months previous, while in attendance on a sick brother, she had occasion to draw the cork from a bottle, and felt at the moment a sudden crack at the point where the present tumor is situated. A short time afterwards a small swelling, having a decided pulsation, was distinguished at that spot, which has gone on increasing until it has attained its present size. It had a powerful pulsation, and possessed the usual thrill characteristic of an aneurismal affection.

After having examined the tumor and learned its history, I endeavored to discover the subclavian artery in its normal situation beneath the clavicle, at the point where it passes over the first rib. To my surprise no large vessel or any osseous protuberance answering to the tubercle of the first rib, usually taken as the guide to the artery in this position, could be found. Different parts of the neck were then explored, which finally led to the discovery of a large artery passing obliquely upwards, parallel to, and about an inch removed from, the external border of the trapezius muscle. Compression being made at this point, the pulsations of the tumor ceased, as well as the pulse at the wrist. There was no question, therefore, in my mind, that this was the subclavian artery, but it was more difficult to determine this remarkable anomaly.

I now sought for the first rib, and to my surprise discovered both the first and a part of the second rib passing obliquely across the neck above the clavicle. The insertion of the scalenus anticus muscle into the first rib, was at length distinguished; the tubercle, however, was not sufficiently developed to be manifest to the touch. The whole osseous system of the chest in this case seemed to have undergone a partial displacement. The spine and ribs attached had been, as it were, moved upwards; while the sternum was carried in an opposite direction.

Making a strong compression on the vessel above the tumor, the arm became extremely painful with a sensation of numbness, and on a subsequent and more careful examination the whole brachial plexus of nerves could be discriminated, in immediate contact with the artery.

An incision, about two inches long, was made, extending from near the outer and upper edge of the sterno-mastoid muscle downwards, in the direction of the scapulo-clavicular articulation, and an inch from the edge of the trapezius muscle, the pulsations of the vessel being the principal guide, as the other anatomical marks were wanting. This incision divided the skin and superficial fascia; a second cut opened one of the branches of an artery given off from the thyroid axis, which was tied. A nervous band of some size was encountered, and at its side and directly over the artery a large vein, apparently the external jugular. The vein was carried to the upper part of the wound with a silver hook, and the nerve to the lower; the dragging upon the latter caused a disagreeable and somewhat painful sensation in the arm.

The sheath of the vessel was next opened, the cellular membrane around it cleared away, and the aneurism needle, unarmed, passed from below upwards, on account of the difficulty of introducing it in the contrary direction from the interference of the scalenus anticus, which had its insertion just below. The needle at once encountered and raised the lower nerve of the brachial plexus, which was in the most intimate contact with the artery. By depressing the handle, and urging the point forwards, with careful manipulation the eye of the needle was without difficulty brought out between these two organs. The instrument was now threaded with the ligature and withdrawn. Careful exploration being made to ascertain if any nerve was included in the ligature, the painful sensations in the arm caused by drawing the ligature downwards at first led to the supposition that this might be the case. But when the same traction was made directly upwards, no pain was felt; the former sensations being produced by the dragging on the cervical portion of the brachial plexus, owing to their connection with the vessel.

The ligature was now tied, and the wound dressed. The pulsations in the aneurismal sac, as well as those of the radial artery at the wrist, at once ceased, and all appearance of the tumor vanished. The patient's arm and hand were a little cold directly after the operation, but being rolled in flannel they soon regained their natural temperature.

26*th.*—The patient states, that the pulse at the left wrist returned for a time last evening, it then disappeared, but returned again, though faintly, this morning. I could not discover it at the time of my visit.

27*th.*—She has been somewhat troubled by occasional pains in the arm. The pulse was felt yesterday once or twice by Dr. Buckminster Brown, being intermittent. The wound has healed by the first intention.

29*th.*—The pulse was perceived though feebly, at the wrist, but could not be detected in the axilla. The spot formerly occupied by the aneurismal tumor, now presents an obvious depression.

Jan. 2d, 1848.—the pulse is constant at the wrist.

14*th.*—The ligature still remains on the artery, notwithstanding the traction daily made by the patient in accordance with my directions. A number of large vessels, taking their origin from the subclavian, exist in different parts of the neck. One of these, apparently the supra-scapular, passes directly over the sac, and pulsates so strongly as at first to convey the impression of a return of pulsation in the aneurismal tumor.

March 30th.—Once or twice in the course of the last two or three weeks, finding that the ligature on the vessel was not disposed to become detached, I have seized it with the forceps, and, holding the artery forcibly down on the rib, have twisted the thread with considerable force. This was done for the third time yesterday, and immediately afterwards the ligature separated, *ninety-six* days after the operation.

The wound almost at once closed.

LIGATURE OF THE INTERNAL ILIAC ARTERY, FOR A TRAUMATIC ANEURISM OF THE GLUTEAL.—*Peritonitis—Death.* By H. J. BIGELOW, M. D., (*Amer. Jour. of Med. Sci.*)—A middle-aged Irish woman was stabbed in the right buttock by her husband, on the evening of the 4th of July last. By the evidence of the physician, who was called, a very large quantity of blood was lost. But the bleeding ceased under compression, and the woman was enabled to resume her usual occupations. Three or four weeks subsequently there appeared a numbness and weakness of the extremity of the wounded side, and soon after a small tumor was observed in the situation of the cicatrix of the wound. On her entrance into the hospital in September, there was a tumor over the upper part of the ischiatic notch, about the size of a lady-apple, with an unequivocal though not strong pulsation, and a very marked souffle. The tumor extended into the pelvis, and could be felt both per vaginam and per rectum. No doubt could be entertained of the character of the tumor. Taking into view the fact that the wound of the artery must necessarily have been directly at the ischiatic notch, rendering the possibility of discerning it there a matter of great doubt, it was decided to tie the internal iliac. During her residence at the hospital, and previous to the operation, the numbness of the right lower extremity increased, and several large bullæ like those of pemphigus appeared on the same limb. The operation was performed September 30th. The incision was made above and parallel to Poupart's ligament, the peritoneum raised from the iliac fossa; and the artery readily attained. After the application of the ligature the aneurismal symptoms ceased. The patient continued comfortable for two days; when symptoms of peritoneal inflammation commenced, and she died the eighth day after the operation. At the autopsy a considerable quantity of lymph was found in the peritoneal cavity; but adhesion had taken place in the course of the wound. The right os innominatum, which was exhibited with the parts attached, showed, 1st. The ligature around the internal iliac artery just above its division, and a satisfactory clot formed between this spot and the division of the common iliac. 2dly. The wound of the gluteal artery immediately at its emergence from the notch, and the aneurism composed of two portions, one about the size of a pigeon's egg, formed in the cellular tissue; and the other in the substance of the pyriformis muscle, which latter was the portion felt during life on the inside of the pelvis. In both, the blood was firmly coagulated. The sciatic nerve was compressed and flattened on the spine of the ischium.

CASE OF TRAUMATIC TETANUS SUCCESSFULLY TREATED. By S. C. THORNTON, M. D., (*New-Jersey Med. Rep.*)—The subject of this case was a robust man twenty-four years of age, in whom the disease was induced by an injury on the foot caused by wearing a tight boot. Dr. T. immediately bled him to the extent of twenty ounces, and directed hyd. chlorid. mitis, gr. x., every two hours, and morph. sulph. gr. ½, every three hours, to be continued till my next visit. It the evening Dr. T. saw him again, and directed the spine rubbed with pure potash, and to be covered with a blister extending from the nape of the neck to the os-coccyx, and to continue the calomel and morphia. The agonies of the patient were now extreme, severe spasms occurring every twelve or fifteen minutes. To allay these, chloroform and sulphuric ether were administered and directed to be given alternately every hour during the night, in limited quantities, if circumstances should require it. The moment the patient came under the influence of the ether, he cried out "I am easy now." The paroxysms were not only moderated, but the intervals between them were much longer, so that the poor patient already experienced some relief. Nearly an hour would sometimes elapse between the paroxysms. He was ill for two weeks, during which time he would occasionally suffer from his tetanic symptoms, but good nursing and a steady perseverance in the remedies finally relieved him. The calomel was continued for the first four days; after that reliance was principally placed upon the the sudorific effects of the morphia and the anæsthetic agents which have been named. He took four hundred and ten grains of calomel, (by which he was freely purged and salivated,) twenty-five grains of morphia, consumed twenty-eight ounces of sulphuric ether and eight ounces of chloroform.

MIDWIFERY AND DISEASES OF FEMALES.

Erythematous Stomatitis of the Infant a Cause of Cracked or Chapped Nipples in the Nurse.—By Prof. H. R. Frost.—(*Charleston Med. Jour.*)—Among the causes of cracked or chapped nipples may be mentioned the existence of erythematic stomatitis, with curd-like exudation in the infant. This affection occurs in the first months of infancy, and is by the nurses confounded with follicular stomatitis or aphthæ.

That this affection of the child is the cause of cracked nipples, the following facts will serve to illustrate. Mrs. ——— was confined —— —— after a very favorable accouchement. She nursed her child for six weeks after its birth. At this time she was sensible of an increase of heat in the mouth of the child, and from a sense of soreness felt in the nipple at the time of nursing, began to suspect that the child's mouth was in an unhealthy condition. It was examined, and nothing unusual was observed. Nursing was continued, with an increase of the symptoms, when a further examination discovered this curd-like exudation. The sores of the nipple soon became augmented into painful excoriations with fissures or cracks of the part, causing such pain and distress in nursing that very reluctantly the mother was compelled to give the infant to be nursed by another. The nurse, Rose, was quite well at the time, but at the expiration of a week she commenced suffering in like manner. The child was then taken from her and given to a hired nurse, who becoming sick from other causes, was, after a week's nursing, compelled to return him to Rose. In the interval Rose continued to suffer with a soreness, but upon the infant being returned to her she became much worse, and *her own child* began to suffer in a similar manner: that is, to be affected with an inflammation of the mouth, accompanied with this curd-like exudation.

Oct. 26.—Rose's breast continues in a very painful state—nursing occasioning a great deal of suffering. Several remedies have been employed, and apparently with good effect, but every attempt at nursing inflicts new injury and interrupts the healing process.

The infant was now given to a healthy young woman from the country, whose child was said already to have had the thrush, without communicating any disease to the nipple. Upon nursing the child for a few days *she, too,* began to complain from the same cause. Upon examining the nipple it was evident that a chapped condition had commenced, and it was only by limiting the nursing of the child, by diligent washing with soap and water after each application of the child, and by the use of astringent remedies, that the disease was prevented extending itself.

It is thus apparent that in particular cases a diseased state of the mouth, and seemingly of a very slight character, may communicate such disease to the mother as to incapacitate her from performing a most pleasing and necessary duty to her offspring, and that the breast so affected may communicate the same disease to another infant applied to it.

The contagious character of this disease has been affirmed by some, whilst it has been denied by others. Baron and Billard deny its contagiousness, while other practitioners have known healthy infants to become attacked by sucking from the same breast with those affected with the disease.

I would not be understood as affirming that the serious consequences I have mentioned are capable of being produced in all cases—the contrary, I believe, is the fact; but cases do occur, though fortunately but rarely in which a trifling disease may have the property of communicating a very painful affliction to the mother.

PUERPERAL CONVULSIONS.—Dr. Channing, in his work on "Etherization in Childbirth," gives the history of three cases of puerperal convulsions, which were successfully treated by chloroform and ether. The first case occurred in his own practice; the patient aged twenty-one, was in the middle of the sixth month of pregnancy. She had much anasarca with œdematous fulness of face and neck; she had several convulsions for which she was treated homœopathically. After consciousness was abolished homœopathy was abandoned, and twenty ounces of blood taken from the arm with some relief. Dr. Channing being called in, he "found her with a pulse of one hundred and twenty, not strong or full. Comatose, incapable of being aroused, skin hot, turgid, mottled, mouth open, tongue swollen and protruded between the teeth." A *pain* soon came on and with it a violent spasm. "The spasm was short, but little exceeding a minute, but I think as violent in its whole character as I have ever witnessed." "Heavy, almost suffocating stupor now came on; and, after some time, respiration became easier." With the next pain chloroform was exhibited; "no spasm attended or followed," this was 1, P. M.; pains continued but no convulsions, until 4, P. M., when another and light attack occurred; after this the convulsions appeared to be entirely under the control of the remedy. The patient was delivered about 10, A. M., the next day, and did well. Dr. C. says, "I passed twenty-four hours with this patient, and had opportunities to observe symptoms and the effects of etherization. Inhalation was used to *prevent* convulsions. It was used for some time at the very beginning of uterine effort, and was continued until it ceased. As intervals grew longer, chloroform was less regularly used; but this was regulated entirely by the character of the pain, its length, &c. The report shows how perfectly the object of etherization was attained, convulsons were prevented, so that, with the exception of one fit, the disease did not declare itself after inhalation was begun." Dr. C. gives the details of two other cases in which chloroform, and another in which ether was used with advantage.—*Trans. of College of Phys. of Phil.*

MONSTROUS BIRTHS.—*Five occurring in the same Female.* (Communicated in a letter to Professor Dunglison.) By DR. J. MARTIN.—I will cite the cases of monstrosity occurring in a lady with whom I have been well acquainted for about fourteen years. Previous to that time she gave birth to two well-formed and well-featured children. I attended her in the first case of monstrosity. At the period of my earliest acquaintance with her, she moved in the middle walks of society, and had enjoyed good health up to that time. She was well developed in figure, and gave birth to a child perfectly formed in every respect, with the exception of its head and face. The eyes were placed at the top of the forehead, and all the superior and posterior parts of the head were deficient, the corresponding bones of the cranium being wanting, and the opening fringed round with something very like liver. Her labor was attended with no difficulty; but the liquor amnii was very abundant, and the child was still-born. She had a speedy recovery.

In about eighteen months after this she gave birth to another child which was properly developed as to face and head, but the flexor muscles of the legs and arms were in fault; I could not straighten its legs, arms, fingers, or toes, owing to the flexors being too short. Her labor, this time, was not so easy, in consequence of the arms being flexed on the breast, and the hands below the chin; yet it was not attended with much difficulty, and the liquor amnii was again abundant.

The next two confinements were similar to the first I have detailed, in every respect, the monstrosity being the same; from both she had a speedy recovery.

At the next, (in the winter of 1843–44,) I was not present, being in attendance on the medical lectures in Philadelphia, but I understood that the labor was not accompanied with more severity than is common to woman; the child was defective on the top of the head, and the liver-like growth was there as in the other cases.

In 1846 she was confined again, and I was summoned to watch over her difficulties during her labor. She was in great hope that she would have a perfect child, being led to this conclusion by the strong movements of the child *in utero.* During the labor the os tincæ dilated rather reluctantly; but when dilatation did occur and the membranes were ruptured, a great discharge of liquor amnii took place, and I was enabled to discover that the head was defective while it was still at the superior strait. The deficiency was the same as in the other instances, but it was born alive and lived about three hours, and moved and made considerable muscular exertion. There was hemorrhage from the liver-like production on the top of the head. This child assumed a cerulean hue, becoming more livid from the moment of its birth till its death. The lady recovered rapidly.

The last misfortune was in 1847, when she had a miscarriage; the embryo was about two inches in length, and the defect at the top of the head could be very readily discovered.

Here, then, are five cases of mature labor, the products of which were all defective at the top of the cranium. One carried to the full term and defective in the flexor muscles, and one abortion, in which the embryo exhibited the same defect at the upper portion of the cranium, and all occurring in the same female apparently in the enjoyment of perfect health.—*Med. Exam.*

PUERPERAL PERITONITIS AND HYSTERITIS—SUCCEEDED BY PHLEGMASIÆ DOLENS.—By D B. TRIMBLE, M. D.—(*New-Jersey Med. Rep.*)—Mrs. A., aged about 28 years, of a leuco-phlegmatic habit, was delivered of twins, after a tedious labor, on the 15th of July. I had been called to see her three times within the preceding month: the first time, on account of severe cephalalgia, of an intermittent character, accompanied with some uneasiness in the loins. Her pulse being pretty full, I took about 12 ounces of blood from the arm, and in about an hour after the pains in the head ceased, and became regular in the back. After remaining a considerable time, and finding the os uteri undilated, I administered an opiate and left her. The pains in the loins gradually abated, and next morning she appeared entirely relieved. Twice after this, at intervals of a week or ten days, she sent for me, when the uterine contractions were so strong and regular as to induce me to think that labor had commenced, the os uteri being slightly dilated. On the 15th of July she was delivered of two boys, and though the labor was tedious, there was no difficulty in removing the secundines, and she appeared to be doing well up to the 20th, when she was taken with severe pain in the uterine and abdominal region, and when I saw her (about 12 o'clock, M.) I found her suffering severe pain, particularly in moving, or on pressure in the abdomen, which was considerably tumefied. The lochia was entirely suppressed, and the secretion of milk diminished; retention of urine, and the pulse fuller and more accelerated than usual. I bled her freely, administered a full dose of ol. ricini, and had warm stimulating fomentations applied to the abdomen. At 6 o'clock, I called again; the swelling of the abdomen had greatly increased, together with the tenderness; there was considerable dyspnœa; the pulse was soft and small, but frequent. She was reclining, with her shoulders elevated, her knees drawn towards the body, so as to relieve the tension of the abdominal muscles; she was larger than before her delivery; and her countenance was expressive of great anxiety and suffering. The castor oil had had a moderate effect, and I then prescribed the following—℞. Pro. chl. hydrarg., gr. xij.; pulv. opii, gr. iv. Div. in pulv. No. iv.—one to be taken every two hours. I also directed 40 leeches to be applied to the abdomen below the umbilicus. 21st. Found her rather more comfortable, though still oppressed in her respiration; abdominal tumefaction slightly abated, though the tenderness continued unmitigated. Pulse moderately tense, and frequent; continued the calomel and opium; applied a large epispastic over the abdomen. Six o'clock, P. M. Free alvine evacuations of dark bilious fæces, affording some relief to the pain. Considerable moisture on the skin; swelling somewhat decreased, pain less acute, dyspnœa partially alleviated. Directed ol. ricini, 1 oz.; ol. terebinth., 1 dr., to be given at a draught. 22d. Symptoms improving, but the pulse being full, more tense and frequent, I ventured upon abstracting more blood, and took about ten ounces from the arm. Prescribed calomel and opium in the proportion of one grain of each, every three hours. Had thin emollient poultices applied over the whole abdomen, which appeared to give considerable temporary relief. About an hour after this bleeding she became very much prostrated, and I was compelled to give her stimulants, viz., wine whey and aq. ammonia. She rallied in the course of five or six hours, and was much relieved. 23d, 8 o'clock A. M. Much better; less abdominal tenderness; less difficulty of breathing; pulse softer and slower. Directed the castor oil and spts. turpentine to be repeated, which procured copious tar-like discharges. With the occasional administration of a grain of opium, a gentle purgative, light diet and cooling drinks, she was becoming rapidly convalescent, when she imprudently left her bed, and was suddenly taken with severe pain in the right groin, followed by rapid enlargement of the thigh and leg of the same side, accompanied with great suffering. There was no discoloration of the limb, and it presented a glossy appearance. By giving her supertart. potass., pulv. Doveri, the application of a blister to the thigh, and the persevering use of the camphorated oil, the swelling gradually abated, and she eventually, under the use of an unirritating, nourishing diet, and for a short time mild tonics, recovered her usual health, with the exception of the enlargement of some of the superficial veins of the leg, which continues somewhat swollen.

From the foregoing description of this case, I think it will appear evident that there was considerable uterine irritability, and a tendency towards inflammation, prior to delivery; and that the swelled leg was the consequence of the inflammation. The condition of her pulse rendered me cautious in the abstraction of blood, and somewhat doubtful whether it would not terminate as puerperal fever; and I was alarmed at the prostration produced by the second bleeding, though gratified afterwards by the great relief it afforded. This is the fifth case of combined peritonitis and hysteritis that I have had in my practice, and the same general course, viz., blood-letting, blistering, calomel and opium, has been successful with them all.

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DEATH OF A FŒTUS IN UTERO BY LIGHTNING—*the mother escaping.*—Our valuable contributor to the Journal, Dr. J. A. Mayes, of Bradleyville, So. Ca., writes to us, under date Dec. 8th: "Looking over the pages of the December No., I noticed an account of several persons struck with lightning, the reading of which brought to my recollection the following case. A negro woman, about 30 years of age, in good health, and eight months advanced in pregnancy, was overtaken by a thunder-storm in the month of August, 1848. For protection against the rain and wind, she *leaned* against a pine tree, but had scarcely done so, before the tree was struck by lightning. The shoulders, front of the chest and abdomen, were severely burned, but the brain was, in no respect, injured. From that time, to her delivery, which was three weeks afterwards, she complained of being very unwell. The child was dead, and appearances indicated that it had been so from the time the mother received the stroke of lightning. The woman recovered rapidly. This, then, is a case of a child in utero being killed by lightning, whilst the mother escaped."—(*South Med. and Surg. Jour.*)

MISCELLANEA.

Western Journal of Medicine and Surgery.—The hearty response given to the appeal of the editors of this Journal in their last November number has decided them to continue the work. The pleasure which the knowledge of this fact affords us will, we think, only be equalled by that felt by the whole profession, more especially those who have read the spirited letters of Dr. Yandell, written whilst in Europe. By-the-by, we learn that they have been republished in book form, but as yet we have not received a copy of the work.

New Adhesive Mixture.—Dr. Sanborn, of Andover, Mass., has made a new adhesive preparation that is likely to prove a prominent rival to the collodion. Gutta percha is dissolved in chloroform, having about the consistency of melted glue. It is applied with a brush, and meets the decided approval of competent judges. The inventor says that he communicated the discovery of the properties of this combination to one of the Boston papers more than a year ago. The menstruum does not evaporate quite so rapidly as ether, consequently the gutta percha adhesive fluid is rather more economical than the collodion, which rapidly disappears, after removing the cork.—(*Boston Med. and Surg. Jour.*)

East Tennessee Medical Society.—At a meeting of this Society, held at Chattanooga, on the 23d and 24th of November last, a committee was appointed to nominate delegates to the American Medical Association, who report as follows: "*Whereas*, We duly appreciate the objects of the American Medical Association, and believe that it will have a salutary influence upon, and will tend to elevate, the medical profession; that it is calculated to disseminate information and promote a union among its members, it is therefore

"*Resolved*, That F. A. Ramsay, of Knoxville, and S. B. Bowles, of Marion, be appointed delegates from this Society to the American Medical Association, which meets at Boston in May next.

Resolved, That the ethics published in the transactions of the American Medical Association be adopted by this Society for the government of its members.

Resolved, That any member violating any part or parts of said ethics, will be amenable to presentation by any member to whose knowledge the violation may become known, and subject to degradation by expulsion."—(*Medical News.*)

Georgia Medical Convention.—The last number of the Southern Medical and Surgical Journal contains a call made by the Faculty of the Medical College of Georgia, to the physicians of the state, for a convention which was to have been held on Tuesday, the 20th ultimo, in the city of Augusta. The states of Alabama and South Carolina have already held conventions, and we heartily rejoice to learn that the state of Georgia is not willing to be behind her sister states in furthering the interests of medical science.

Dr. B. Dowler and the Academy of Natural Sciences, Philadelphia.—We are gratified to learn that our *confrere* and fellow-citizen, Dr. Bennett Dowler, has received from this learned and scientific academy the honorable title of Corresponding Member. We believe he is the first physician of the South who has been thus honored; and his laborious researches into natural sciences and their kindred subjects, fully entitle him to this distinction. We congratulate Dr. D., and trust he may live to gain yet higher honors in the field of science.—(*N. Orleans Med. and Surg. Jour.*)

Monstrosity.—A most singular case of congenital deformity was presented at Dr. Parker's clinique on Monday last—a child three months old, apparently healthy, was born with the tibia of both legs apparently broken and united again, with the bone bent at an angle of 45 degrees, and several dimples in front of the prominent end of the tibia, as though the rough end of the bone had at some time projected through. There were four toes on one foot and three on the other.—*Annalist.*

New-York Dispensary.—By the annual report of this charity, we learn that 35,904 persons have received medical and surgical aid from this institution the past year. This number exceeds that of the previous year by 7,677. Of the whole number attended, 22,225 were natives of Ireland, 10,428 natives of the U. States, 1,300 of Germany.

Philadelphia County Medical Society.—The first stated meeting of this society was held January 16th, 1849, when the following officers were elected for the current year:—*President*, Samuel Jackson, M. D., (late of Northumberland); *Vice-Presidents*, George Fox, M. D., T. F. Betton, M. D.; *Recording Secretary*, D. Francis Condie, M. D.; *Corresponding Secretary*, Henry S. Patterson, M. D.; *Treasurer*, M. M. Reeves, M. D.; *Censors*, Drs. Thomas Hobson, J. Forsyth Meigs, Wilson Jewell, Isaac Parrish, David H. Tucker.—(*Med. News and Library.*)

Medical Literature.—Kirke's and Paget's Manual of Physiology for the Use of Students, in one 12mo. volume, with 118 wood-cuts; and Bowman's new work on Practical Chemistry, in one volume 12mo., fully illustrated, have just been published by Lea & Blanchard. The same publishers are passing rapidly through the press Sharpey and Quain's extended System of Human Anatomy, edited by Dr. Leidy, to form two large octavo volumes, with very many *new* illustrations. Day on the Diseases of Old Age is nearly ready, in one 8vo. volume; and Maclise's Surgical Anatomy, in Royal 4to., is preparing. Part I. will soon be ready, and Part II. will follow quickly.—(*Ibid.*)

OBITUARY.

Death of Dr. Stephen Batcheller.—Died, on the 7th of November, 1848, at Royalston, (Mass.) Dr. Stephen Batcheller, aged 70 years. He was born in the town of Royalston, on the 3d of January, 1778. His preparatory education was obtained at the Academies of Chesterfield, N. H., and New-Salem, Mass. His father being a physician, his medical education was commenced with him. The latter period of his pupilage was spent with the late Dr. Wells, of Montague, one of the most distinguished physicians of New-England. He commenced the practice of his profession at Truro, Cape Cod, in the autumn of 1800, being then 22 years of age. In 1803, he removed to Royalston, and there continued to practise successfully his profession until death. On the 1st of June, 1814, he was elected a Fellow of the Mass. Med. Society. He held the office of Counsellor of the Society for a number of years, and for two years that of Vice-President. He was one of the founders of the District Society for the county of Worcester, and for some years President of the same. For the year 1848, he was one of the delegates of the Mass. Med. Society to the American Association, held at Baltimore, which he attended, and at the time of his death was a member of the same. He literally died in the harness. He practised in two of the adjacent towns on the very day of his death. As a physician, Dr. Batcheller certainly held a high and very respectable rank, and was greatly esteemed by those of his professional brethren who were most intimately acquainted with him. He probably had, for many years, a more extensive consultation practice than any other physician in the county of Worcester, and perhaps in the State. He died of apoplexy.—(*Condensed from Prof. S. Williams' Bio. Not. in Boston Med. and Surg. Jour.*)

OBITUARY NOTICE OF HENRY NEILL, M. D.—Dr. Neill was born at Snow Hill, on the eastern shore of Maryland, in the year 1783. His preliminary education was acquired in the county Academy, where he prosecuted his classic studies with success. He commenced his professional studies in Philadelphia, under the tuition of Dr. Church, a celebrated lecturer on obstetrics. In 1807, he graduated as a Doctor of Medicine, at the University of Pennsylvania; after which time he was for a number of years one of the physicians of the City Dispensary. He was chosen a Fellow of the College of Physicians of Philadelphia on the 2d day of July, 1811, and elected a Censor of the same in 1818. This office he filled ably for many years; and by the excellence of his character and the soundness of his judgment. he secured the respect and confidence of his colleagues, and in the month of July, 1844, they evinced their appreciation of his merits by electing him Vice-President of the College, and thus associating his name with the honored ones of Parrish, Otto, and Hewson, his immediate predecessors in that office. He furnished for the press several articles of great practical value, which were published in the North American Medical and Surgical Journal. He died on the 7th of October, 1845, in the 64th year of his age.

Dr. Neill's devotion to the duties of his profession was untiring. He read much, observed carefully, thought philosophically, consequently his judgment was excellent, and upon it he early accustomed himself to rely. Those who were best acquainted with him scarcely knew which most to admire, the sweet simplicity, humility, and kindness of heart, which cast a charm over his whole appearance and manner, or the lofty moral courage which ever animated him in the path of duty, raising him above all the dread of man or of man's opinions, and enabling him to go forward without shrinking, through scenes the most trying and severe.—(*Condensed from Dr. J. M. Paul's Obit. Not. in Summary of Trans. of Coll. of Physicians, Phila.*)

PART FOURTH.

FOREIGN MEDICAL RETROSPECT.

PATHOLOGY AND PRACTICAL MEDICINE.

Spontaneous Rupture of the Aorta, dissecting Aneurism. By Dr. PEACOCK.—This preparation was removed from the body of a man, 44 years of age, who had been of intemperate habits, but had never suffered from rheumatism. He dated the first symptoms of cardiac disorder to a blow which he had received on the chest twelve years before. When admitted a patient of the city of London Hospital for Diseases of the Chest, on the 30th of June last, he stated that he had been very subject to palpitation of the heart for the previous year and a half, but had been much worse since December, 1847. He was at that time in much pecuniary embarrassment, and when out one morning was suddenly seized with extreme difficulty of breathing, palpitation, pain in the region of the heart, and faintness, and with difficulty reached home. From this time he was never able to sleep in the recumbent position, and was subject to attacks of a similar description, generally once a week. These attacks usually came on at about one o'clock in the morning, and after continuing, with variable severity for half an hour or more, gradually subsided. The difficulty of breathing and palpitation under which he at all times labored, were much increased on exertion, and especially by ascending stairs. Latterly he had a hard dry cough, and scanty expectoration, very rarely tinged with blood. On examining the chest, the dulness on percussion in the region of the heart was found much extended beyond its natural limits, and there was a loud and rough double murmur over the whole of the front of the chest, but most distinctly between the left nipple and sternum. The pulse was equal in the two wrists, feeble, but not of the regurgitant character.

At the end of August, after having been some time in the country, he was suddenly called to town. On his way to the railway station he became much excited, fearing he would be too late for the train, and soon after he had started he suddenly experienced a peculiar sensation commencing in the lower part of the abdomen, followed by pain in the præcordia, and extending thence to the spine of the back: he became faint, and breathed with great difficulty. When he arrived at home, he was seen by Mr. Mackey, and found very much collapsed; the extremities cold; he had entire suppression of urine, and complained of pain in the region of the heart and in the back. He was visited by Dr. Peacock in the evening. At that time the collapse had, in some degree, subsided; he was completely collected, and was kneeling on a sofa, with his head hanging over the end. The respiration was extremely difficult, the pulse was feeble and somewhat vibratory; the extremities were cool, and he complained of agonizing pain in the region of the heart, and extending thence to the back and down the spine from the occiput. The suppression of urine continued. A loud and rough murmur attending the impulse of the heart, was audible over the whole front of the chest. It was less distinct beneath the nipple than at the upper part of the sternum. A softer murmur was also heard with the diastole of the heart, more especially at the lower part of the sternum. He experienced some relief from the means had recourse to, but about one o'clock the following morning suddenly expired.

On examination, the pericardium was found greatly distended with serum, and the heart was enveloped in a firm dark-colored coagulum. On removing this, a ragged slit, about an inch in length, was detected in the pericardial covering of the origin of the aorta, extending transversely immediately above the base of the right ventricle. The heart was of large size, weighing not less than 20 oz. The attached pericardium displayed some concretions of old lymph on the surface of the left ventricle, and was thickened and opaque on the right ventricle. The right ventricle was large, but its walls of the natural thickness; the left ventricle was hypertrophied and dilated. The auricles were natural. The folds of the mitral valve were thickened and opaque. The aortic valves were much thickened and shortened at their free edges, and the angles of the right and left valves were adherent, so as to leave an aperture when the valves were expanded, allowing of slow regurgitation. The ascending aorta was dilated, and its coats thin and studded in places with ætheromatous deposit. At the anterior and right side of the vessel, about one inch above its origin, there was an irregular slit ¾ of an inch in length, extending obliquely across, and involving the internal and nearly the whole of the middle coat. From this rupture blood had escaped, and had become extensively infiltrated into the subserous cellular tissue, and had finally escaped through the rupture in the serous covering into the sac of the pericardium. At the posterior part of the root of the arteria innominata, there was found a second rupture, about one-third of an inch long, which extended through only part of the middle coat, and from which the blood had insinuated itself between the laminæ of the middle coat, producing a separation extending round a considerable portion of the circle of the transverse and descending aorta, for a distance of about two inches behind the origin of the left subclavian artery. The descending aorta was decidedly small in capacity.

The remarks made by Dr. Peacock, in reference to this case, were—first, that the occurrence of two ruptures in different parts of the vessel sufficiently attested the ready lacerability of the arterial coats. The rupture at the root of the arteria innominata was probably that which had first occurred, while the production of the second and larger laceration in the ascending aorta might be due to the obstruction to the flow of blood along the transverse and descending portions of that vessel occasioned by the pressure of the blood which had escaped between the laminæ of the middle coat. The second point of interest consisted in the separation of the coats of the vessel, constituting the first step in the product of the dissecting aneurism, having occurred in the laminæ of the middle coat. This, there is reason to believe, is always the case in dissecting aneurisms, though in some cases on record the sac has been described as situated between the middle and external coat. In two cases so described, Dr. Peacock had satisfied himself that there had been an error in the description given, the sac being situated in the laminæ of the middle coat in both.—*Med. Gaz.*

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Hydatids of the Brain.—In communicating to the Royal Medico-Chirurgical Society the details of a case reported by Dr. Stewart, Dr. Gregory remarked on the greater rarity of acephalocysts, or hydatids in the intra-cranial structures, than in the thoracic or abdominal tissues, and referred to Dr. Craigie's observation that in the greater number of reported cases only solitary serous cysts existed, not clustered hydatids. After noticing briefly three cases, one described by Rendtorff, a second related by Mr. Mowatt, of Worthing, in the second volume of the 'Medico-Chirurgical Transactions,' and the third communicated by Mr. Burnell to the late Dr. Baillie, who remarked that none such had ever fallen under his own observation, Dr. Gregory states, as the result of his own reading, that the normal series of symptoms flowing from the development of intra-cranial hydatids seem to be the following:—Pain in the head, succeeded, after a considerable time, by epileptic fits, and terminating in apoplexy. The Pathological Museum of the Army Medical Department at Fort Pitt, Chatham, contains two specimens of hydatids of the brain. An account of all that is known relative to these cases has been furnished to Dr. Gregory by Dr. French. In the first case, no cerebral symptoms were noticed during life. After death, cysts, described as hydatids, were found beneath the pia-mater, covering the hemispheres, in the right corpus striatum, and in the substance of the cerebrum in its immediate vicinity. In the second case, epileptic fits were present for three years and five months before death. Here were found small round bodies, like hydatids, some hard and almost cartilaginous, not only beneath the pia-mater, but also generally throughout the substance of both the cerebrum and cerebellum. They were collected to the amount of an ounce or more. Each consisted of a distinct membranous sac, which sometimes appeared double, and in layers like an onion. All the cysts contained a clear fluid, with more or less cheesy-looking matter. Dr. Gregory then communicated the following case, which, at his request, had been transmitted to him by Dr. Stewart. The patient, a gunner of the Royal Artillery, æt. 24 years and 9 months, was admitted into the Artillery Hospital, Woolwich, on the 29th of April, 1848, immediately on his arrival from Malta, with the following history: He had arrived in Malta with his company in February, 1847, and from that time suffered with constant headache. In November, 1847, he had a severe epileptic fit, followed by coma. Subsequently imbecility showed itself, and vision became impaired, the pupils sluggish, and the left eyelid became affected with slight ptosis. His memory became defective, and he became subject to fits of uncontrollable laughter. His hearing was but little affected, but both eyes were amaurotic. He died after a succession of epileptic fits, ending in coma. After death there was found on the middle fossa of the base of the cranium, between the dura-mater and the cranial bones, a mass the size of the closed fist, which proved to be a collection of hydatids. These were numerous, and varied in size from a pea to an orange. The substance of the brain was compressed, but otherwise normal.—(*Ranking's Abstract.*)

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Œdema of the Glottis.—(*Dublin Path. Rep.*)—Dr. M'Dowell presented a specimen of œdema of the glottis, taken from the body of a man aged 48, who was admitted into the Hardwicke Hospital laboring under pneumonia of the upper lobe of the left lung, extending from above downwards, and accompanied by considerable fever. The pneumonia yielded to appropriate treatment; then there appeared some fulness, attended with pain, below the angle of the jaw, on the left side of the neck. In this situation an abscess formed, which Dr. M'Dowell regarded as one of these critical abscesses so frequent in the fever then prevalent in Dublin. There were no very urgent symptoms, but after three or four days a blush of redness appeared over the tumor, which had considerably increased in size; there was now also difficulty of deglutition. The abscess was freely opened on the 18th of January, by an incision made through the cervical fascia; healthy pus was given exit to, and much relief was experienced. At six o'clock in the evening of the same day intense dyspnœa occurred; there was also great difficulty of swallowing. The clinical clerk, being called for, found the patient sitting up in bed, breathing convulsively, his face livid, a clammy sweat every where bedewing the surface, the extremities cold, and the vital powers rapidly sinking. Dr. M'Dowell was immediately sent for, but before the messenger reached him the patient had expired, after one or two violent convulsions. On examining the body after death, the abscess in the neck was carefully explored. It was situated below the parotid gland, and a little behind the angle of the jaw on the left side. It extended deeply inwards towards the larynx, and the tissues between it and the exterior of the larynx were condensed. On cutting into the larynx the submucous tissue of the arytenoid region was found so infiltrated that the opening of the glottis was completely obstructed; the remainder of the larynx was healthy. The upper part of the left lung was still solidified. Dr. M'Dowell remarked that the interest of this case depended on the occurrence of œdema of the glottis produced by subfacial inflammation, but only coming on after the abscess was discharging freely, and at a time when all danger of such a complication might be supposed to be at an end.

Strictures of the Urethra.—An article on the formation of organic stricture in the male urethra, with some remarks on their consequences and treatment, will be found in the Dublin Quarterly, by Dr. Wilmot. This gentleman states that, in gleety discharges, occurring in the early stage of stricture, he never thinks of prescribing medicine with the expectation of curing the discharge; he passes a plaster bougie, and in general finds a sensitive part, at or near which spot a soft obstruction can be frequently felt, which appears little, if any, impediment in the passage of the instrument; by continuing the use of the bougie every second or third day for some time, the morbid sensibility of the part will be removed, the gleety discharge will cease, and the pulpy obstruction, and all the other thickening will disappear, leaving the urethra free; in such cases it is necessary to pass the bougie for some time after all the symptoms have declined. To prevent relapses in strictures, for all are liable to return after a time, the occasional application of instruments is absolutely necessary for a long while. Dr. Wilmot has found, in his own practice, use for almost all the instruments which have from time to time been invented for the removal of strictures. The plaster bougie is a great favorite with him; it is applicable in recent stricture, and he has succeeded with it in those which are seated either at or behind the bulb. The gum-elastic catheter, the catgut bougie, and the metallic catheter and sound have all their special uses, which are in part explained and illustrated in this paper by plates. In cases of stricture, in which there is a predisposition to rigor, Dr. Wilmot advocates resort to a large dose of opium before the instrument is used. This gentleman states, also, that he has effected some cures of impassable strictures by a tolerably large gum-elastic catheter, or bougie, pressed against the stricture for fifteen or twenty minutes every second day. Dr. Wilmot also urges the necessity of hygienic treatment during the local treatment of strictures.—(*Ranking's Abst.*)

SURGERY.

Dislocation of the Pelvis.—M. Murville, in a memoir presented to the French Academy of Medicine, on luxations of the pelvic bones, relates the two following very remarkable examples of this accident. The first was the case of an officer, who fell from a second floor window, and lighted on the tubera ischii. The sacrum was displaced downwards by the weight of the body. On examination, the crests of the ilia were found to be almost touching the false ribs; the os coccygis, much shattered, projected considerably below. The patient complained of great pain in the sacro-iliac symphysis, with paralysis of the bladder and rectum, small pulse, and other signs of collapse. He was restored somewhat by stimulants, and when reaction was fully established, he was treated antiphlogistically, the displaced bones being maintained as motionless as possible. No attempt at reduction was considered advisable. This treatment was marvellously successful; not only did the patient survive, but the paralysis diminished, and in ten days the patient was able to walk with difficulty.

The second case is unique. An officer, during a review, was run away with, the horse, at the same time, plunging violently; in one of the plunges he was thrown considerably from his saddle, upon which he descended again with such force as to lacerate the left side of the pelvic arch, without injuring the skin. A second plunge of the animal added to the mischief, completely rupturing the ligaments of the symphysis pubis. When examined, a large inguinal hernia was discovered on the left side, and in the perineum a tumor projected as large as the fist, which could be pushed upwards into the pelvis. The symphysis pubis was separated to an extent which allowed the hand to be insinuated between the ossa pubis. The hernia was reduced, and the bones kept in apposition by bandages, and in three months the patient was able to walk. M. Murville, upon this case, founded some remarks upon the feasibility of the operation of division of the symphysis in labor. In a discussion which ensued, M. Malgaigne doubted that it was a case of simple dislocation, thinking it probable that there was also fracture.—(*Prov. Med. and Surg. Jour.*)

Instruments for Tracheotomy. By MARSHAL HALL, M. D.—Every recollection I have of tracheotomy convinces me that it is far more advisable to remove a circular portion of the trachea, and to secure the integuments and muscles from passing over the orifice made, than to use a tube.

In one case, after the use of the tube for a few days, with much inflammation and irritation, it was removed entirely, and the patient breathed freely several weeks through the orifice only.

In another case, the tube excited so much inflammation as, I believe, to prove fatal.

I would, therefore, propose the rejection of the silver tube. This may be still more necessary in tetanus or hydrophobia, should the operation ever be performed in these cases, than in any other, on account of the augmented irritability of the spinal system.

Reduced to this simplicity, therefore, all that is required is an instrument for removing a circular portion of the trachea. A steel tube with an extremely sharp edge at the lower part, to which a piston is accurately fitted, is all that is required. All hemorrhage having ceased, this tube must be accurately applied to the trachea, and with a little force, and the piston is to be drawn smartly upwards. The portion of the trachea is drawn into the tube with a slight report.

It must be admitted, however, that such an instrument would require to be in excellent order, and to be used with a skilful hand. The profession are, therefore, indebted to Mr. Weiss, who kindly volunteered his aid in carrying out my suggestion, for proposing a material improvement in my instrument.

It may be known that a steel tube, with a lower cutting edge, through which a small screw, in the form of a cork-screw, is made to pass, is employed for removing a minute portion of the tympanum in certain cases of deafness. Mr. Weiss proposed to use a little cork-screw of this kind instead of the piston, in the instrument for tracheotomy, and such an instrument is now before me.

The portion of trachea is seized by the screw, and the steel tube descends with a rotary motion, and removes the portion of trachea with the utmost facility and certainty.

A still more simple instrument could be constructed, by substituting a small *tenaculum* for the cork-screw. Indeed, with the aid of a small tenaculum, the skilful surgeon would readily remove a circular or oval portion of the trachea, by means of a couching-needle or a very small scalpel; or such an instrument might be made to revolve round a fixed point. Thus, then, the profession is provided with a ready mode of performing tracheotomy.

Besides the case of laryngitis, of tetanus, or of hydrophobia, the patient in the stertor of drunkenness, of epilepsy, or of apoplexy, when this is extreme, dies of asphyxia. Now that tracheotomy is rendered so safe and easy, I trust such an event will not again be permitted to occur.

There is another view of this remarkable question. I believe no violent *general* convulsion could occur, if the glottis were not closed; in other words, if the trachea were opened. Might not the faculties, or the life of the epileptic patient, be preserved by tracheotomy, the orifice being preserved open? The wound might be healed like that of the pierced ear, and opened or closed as the occasion required. I would propose this measure, as a preventive, in the case of frequent severe epileptic seizure. Over the orifice a proper guard might be worn, permitting the ingress and egress of the air, and admitting of being closed at will for articulation.

One gentleman has asserted that the hydrophobic patient does not die of asphyxia. I should think he never *saw*, or carefully observed and watched, a case of that most fearful of maladies, as he is obviously unacquainted with the writings of Dr. Physick, of Philadelphia.

I need not remind my readers of the importance of some proper instrument for the performance of tracheotomy in *infants* and children, in whom the free *space* over the trachea is so limited.—(*London Lancet.*)

Gutta-Percha in Wounds.—Gutta-percha may be readily dissolved in bisulphuret of carbon in all proportions, and without the aid of heat. When a few drops of this solution are placed on the surface of any object, the carburet of sulphur evaporates with great rapidity, and leaves a thin layer of gutta-percha, which acts as a preservative against the influence of air. On account of this, M. Vogel has employed this solution to cover wounds caused by a cutting instrument. The carburet of sulphur in evaporating produces a sensation of cold in the skin, which acts as an antiphlogistic, and a reünion of the margins of the wound is readily effected. The sulphuret of carbon should be quite pure and free from all traces of sulphuretted hydrogen. This may be effected by treating it with litharge or carbonate of lead. He has also employed this solution for covering the surfaces of fruit which it is wished to preserve in a collection of natural history. Up to the present time a solution of wax has been employed for this purpose, but there is a great difficulty in removing the wax from the fruit without tearing the surface. The solution of gutta-percha, which completely prevents the fruit from drying, has also the advantage of being easily removed by means of hot water. The solution offers also a great advantage for paintings and drawings, for it possesses the property of fixing in the paper, pencil, chalk, or charcoal drawings in such a manner that it is impossible to injure them by friction.—*Med. Times.*

Treatment of Lupus.—In the "Revue Méd. Chirurgical," M. Emery publishes the results of his experience in this disease. He has found that no treatment, whether internal or external, possesses the efficacy of cod-liver oil in large doses. The quantity of this medicine exhibited by M. Emery will doubtless astonish our readers. It is in doses from sixteen to thirty-two ounces daily that it should be used. With every deference to the learned physician of the Hôpital St. Louis, we must say that few patients will be able to keep on their stomachs such exaggerated quantities of a particularly nauseous medicine, and that, even if they succeeded in not rejecting it, it is questionable if anything like that amount can possibly be absorbed, oily substances being generally changed within the stomach into insoluble adipocerous compounds. M. Emery states, however, that, having had occasion to treat seventy-two cases of confirmed lupus, twenty-eight were completely cured by a persevering use of this medicine.—*Ibid.*.

MIDWIFERY AND DISEASES OF FEMALES.

Accidental Expulsion of a Child, without its experiencing any injury from the fall.—(*Med. Gaz.*)—A woman of short stature, 34 years of age, strongly built, gave birth to a child in an ordinary labor one year after marriage. On the 10th of July, being near the end of her second pregnancy, the period of gestation was accidently terminated. She was engaged in a violent dispute with her husband, which was nearly coming to blows: she abruptly rushed into an adjoining room, and was in the act of sitting on the bed, when suddenly strong labor came on. Before she could reach the door and call for help, the pains became so severe that she was obliged to lean for support against a chair; at the same moment the child fell suddenly to the ground, without being in the least injured. On his visit, Dr. Pickford found not even a bruise on the vertex, on which the child had fallen. The placenta was expelled as he entered, and it showed that the cord had been ruptured at about the distance of two inches from the umbilicus. The child was strong and fully developed.—*Dr. Pickford*, in *Henle's Zeitchrift für rationelle Medizin*, vol. vii., part i., p. 25.

The use of Ergot in Post-Partum Hemorrhage.—We have mentioned the administration of ergot of rye as a preventive of *post-partum* hemorrhage; and in the hospital we have seen such decidedly favorable results from its use, when employed for this purpose, as to have no hesitation in pronouncing the practice to be both safe and efficient. With this intention it may be given at one or other of three periods: namely, when the head of the child is on the perineum, and about to be expelled; or immediately after the head has cleared the os externum, and before the shoulders have passed; or, thirdly, so soon as the insertion of the cord into the placenta can be felt. "By giving ergot before the child has been expelled, some time may be gained; but should the placenta be morbidly adhering to the uterus, the difficulty of introducing the hand for its removal will be greatly increased. By adopting the third plan, this source of apprehension is avoided. To this method it may be objected that much time will, perhaps, elapse, and a considerable quantity of blood be lost, before the ergot is administered; nevertheless, the possibility of the placenta being morbidly adherent should be ever present in the mind of the practitioner, and deter him from resorting to a measure which may so greatly augment the danger of the complication." Dr. Johnson, who introduced the practice into this hospital, generally gives the ergot according to the mode last recommended. In certain instances, however, where from previous losses it was a matter of the utmost importance to prevent any further hemorrhage after delivery, we have not scrupled to administer it in the second way spoken of above, and hitherto without any unpleasant effect. Here, as on every other occasion, we should be careful to use ergot of undoubted genuine quality, for otherwise its exhibition can be productive of no good, and will only cause disappointment. Few medicines so readily spoil, or are to be found of such variable quality; and this circumstance goes far, we think, to reconcile the conflicting opinions which have been entertained respecting its properties and doses.—*M'Clintock and Hardy's Practical Observations*, pp. 220 and 221.

Prolapsus of the Ovary.—After relating a case of inflamed ovary, where one of its most marked effects was profuse and long standing menorrhagia, Dr. Rigby remarks, that in the case the symptoms varied from their ordinary course, and depended upon the position of the ovary, being much more backwards than usual, and almost approaching to the hollow of the sacrum, hence the inguinal pain generally felt in cases of oophoritis was absent, and, as usual in cases of retroversion, the pain was confined to the region of the sacrum, and greatly increased by the passage of solid fæces through the rectum. This displacement of the ovary downwards and backwards into the recto-vaginal pouch, when in a marked degree, forms a most agonizing affection. In three or four cases which Dr. Rigby has seen, the ovary has been found lower than usual, and approaching nearly to the central line. The slightest touch produces severe pain, of that sickening intolerable character which pressure on the testicle produces in the male, and especially when it is inflamed. Prolapsus of the ovary is the name given to this affection by Dr. Rigby.—(*Med. Times.*)

Twins locked in each other. By Prof. MURPHY.—(*Med. Gaz.*)—A complication of a singular character has been recorded in which delivery was rendered extremely difficult. The late Dr. T. Ferguson, of Dublin, relates a case of twins in which the first child presented the foot, and was delivered without any unusual obstacle in the progress of the labor until the child's body was so far protruded as to enable Dr. Ferguson to ascertain, by the pulsation of the funis, then without the os externum, that the child was alive. From this stage of the delivery he began to experience a most unusual and unaccountable resistance to the further descent of the child. This difficulty was produced by the head of the second child descending before the head of the first, so that each locked in the other. The pulsation in the funis of the first child continuing, Dr. Ferguson wished to perforate the head of the second, that caused the obstruction: there was some delay in obtaining instruments; and, in the interval, the pulsation of the first child ceased; but, to the surprise of Dr. Ferguson, powerful expulsive pains forced down the heads of both over the perineum, and the second child was born living! Two years ago, Mr. Elton, of Windsor, related a similar case. The feet of the first child presented, and were brought down; but, "after the thighs had passed, the delivery became slow and increasingly difficult; the abdomen suffered great compression in passing; the thorax still more; the difficulty became greater with the further progress of the body; the arms were extracted with much trouble, and, it then being practicable, an examination was made. I (Mr. Elton) found the vertex of a full-sized head presenting immediately over the breast in the position where there should have been a chin; the anterior base of the neck could be traced in close and compressed contact with the presenting head, the latter firmly impacted in the pelvic cavity." Mr. Elton divided the neck of the first child; and, having removed the truncated body, applied the forceps to the second child, which he delivered, but could not save, although attempts "to restore animation were long and anxiously continued." What is to be done in such a case as this? I certainly should not be disposed to destroy either child. Before I took up the perforator or the amputating knife, I should weigh well the practicability of applying the long forceps to the head of the second child, and endeavor to imitate nature in the effort to force both heads over the perineum. If you succeeded, its laceration might be the consequence; but it would be some recompense to save a life that otherwise you must destroy."

Preternatural Labors. By Prof. MURPHY.—"The *statistics* of preternatural labors prove that their frequency is in the proportion of one in every thirty or forty labors; and of these, presentations of the breech are the most frequent; those of the feet next in order, and shoulder positions the rarest. We find, also, that a large proportion of these cases are premature deliveries, many of the children being putrid. Hence we would infer that in many instances this deviation from the natural position of the child is caused by its unusual mobility in the uterus at the time of labor. The child being small (premature,) and the liquor amnii abundant, its position is liable to be constantly disturbed by the action of the uterus; and if the membranes were ruptured suddenly, the child would most likely be forced down into the pelvis in a preternatural position. A full-grown child might also be displaced by any sudden and violent action of the uterine fibres, the result of shock, during pregnancy. Putrid children are especially liable to this displacement, because labor is generally induced because of the death of the fœtus, and not in consequence of the descent of the child on the cervix uteri: hence the uterus protrudes the inert mass from its cavity through the pelvis in whatever form it may have assumed at the time that the expulsive action of the uterus was so excited."—*Ibid.*

Malignant Disease of both Ovaries.—By Dr. Johnson.—A female, aged forty, had suffered for the last four months from constant vomiting whenever she took food of any description except diluents. She complained also of great pain in the region of the epigastrium and abdomen, which prevented her from assuming the recumbent posture. Latterly ascites came on, and she rapidly wasted away, and died six months after her illness first commenced.

On post-mortem examination, the abdomen was found quite full of fluid. On discharging this, the great omentum was discovered to be changed into a mass of disease, composed of cancerous tumors about the size of a nut. The interior of the stomach was quite healthy. The peritoneum covering the diaphragm and the large and small intestines was studded with small cancerous tumors. The uterus was perfectly healthy, and of the normal size; but in place of the ovaries there was on each side a rounded mass about the size of an orange, consisting of the same structure as the tumors observed in the omentum.

The case was interesting, inasmuch as the constant vomiting immediately after eating had led to the diagnosis of the extensive disease of the cardiac orifice of the stomach.—*Ibid.*

MATERIA MEDICA.

Mercury and its Effects.—Mr. Hancock inquired if any members had tried the plan recommended by some French surgeons, of giving calomel in very small doses in inflammatory cases? The dose recommended was a twentieth part of a grain every hour, day and night, until the specific effect of the medicine was produced. He had tried this plan with two patients in Charing-cross Hospital, both of whom had been admitted with inflammation of the testicle, consequent upon gonorrhœa. In one case he gave a twentieth of a grain of calomel every hour; in the other, a twentieth of a grain every three hours. In the first case, the patient was salivated in thirty-six hours; in the second case, in forty-eight hours. The advantages of this mode of producing ptyalism were, that the effect was milder and more controllable than where larger doses were administered; the bowels were also unaffected. The mode of its administration was as follows:—Calomel, one grain; confection of opium, a scruple; divide in twenty pills—one every hour. In the cases related, the effects of this medicine were most decided.

Mr. Middleton had been occasionally surprised to see small doses of the mercury and chalk produce ptyalism in children of all ages when given merely as an alterative. Large doses of calomel failed to produce any such effect. He had seen salivation produced in a child by a single dose of the mercury with chalk.

Dr. Willshire had never seen ptyalism in a very young child, though he had observed its effects on the mouth from the administration of this medicine.

Mr. Hooper had never seen a child salivated by calomel. With respect to small doses of calomel to produce the specific effects of mercury on the constitution, he had long been in the habit of employing them. One grain every three or four hours he found more effective than the larger doses.

Mr. Hird said, that if all the beneficial effects of mercury could be obtained from the small doses mentioned by Mr. Hancock, then, indeed, would the new plan be very useful. His opinion, however, founded, it was true, on his experience of the small doses, was, that in acute inflammatory diseases of serous membranes they would be found less effective in lowering the heart's action, and producing the other specific effects of mercury, than the more commonly-employed doses. He had seen the worst effects of mercury in children when employed as alteratives.

Dr. Willshire admitted that the specifics of mercury were exerted most beneficially. In cases of syphilis in young children, one grain of the mercury with chalk, and two grains of soda, night and morning, generally, in ten or fourteen days, succeeded in effecting a cure, but without producing salivation. He threw out a hint that mercury in inflammation might not be so effective as some had imagined, and appealed to the opinions expressed by Dr. Alison, and by a reviewer in *Forbes's Journal*, on this point.

Mr. Robarts believed that the effects of mercury were influenced and modified much by the period of year, state of weather, &c., at which it was administered. He had tried the plan of treating chronic catarrh with small doses of blue-pill, as recommended by Dr. F. Thompson, and published in *The Lancet*, with much success.

Mr. Hancock had found, in cases where it was thought almost impossible to produce salivation, that a few grains of iodide of potassium, administered in the intervals, was most effective.

Mr. Bishop had observed the same circumstances.—*Lond. Med. Gaz.*

Observations on two New Febrifuges.—(*Med. Gaz.*)—The forests which yield the cinchonas are gradually becoming exhausted: hence the price of these and of their salts is daily rising. These circumstances have directed the attention of practitioners to the discovery of substitutes for these expensive remedies. Thus, besides arsenous acid and salicine, the anti-periodic properties of which are well known, there are others whose operation has been less accurately studied: among these, two more particularly have been made the objects of investigation: they are the bark of the Baobab or Adansonia Dentata, and the sulphate of Phyllerine.

The *Baobab* or *Adansonia*, is a gigantic tree, indigenous to Senegal, but it is readily acclimated in colder countries, so that should its febrifuge properties become established, the bark will be procurable in abundance.

The bark, which is the most active part, has a tolerably smooth surface of a blackish gray color, and is studded all over with lichens: its inner surface is of a pure white, quickly reddening on exposure to the air; it contains a large quantity of mucilage, and has scarcely any taste or smell. Its aqueous decoction has somewhat the odor of the cinchonas; it is of a clear reddish color, insipid, holding a large quantity of mucilage, the decomposition of which may be prevented by the addition of a small quantity of sulphuric acid or alcohol. Without this precaution the decoction becomes decomposed in a few hours; but, strange to say, this does not destroy its medicinal qualities. When cold and sweetened, this decoction is not unpalatable.

M. Duchasaing has found this bark highly serviceable in agues, even where quinine had failed; and he states that the planters of Guadaloupe cure their negroes by it alone, though, *à priori*, one would not expect that a mucilaginous bark, free from bitterness, should possess anti-periodic properties; while we see also from the effects of arsenous acid, that bitterness is not necessary to this medicinal action. Galberry and Frank have before stated that the fruit, and Adanson that the leaves, possess anti-periodic properties; but Duchassaing is the first who has pointed out that the bark is the most active part of the plant.

Sulphate of Phyllerine.—M. Jachelli, of Ferrara, has lately added this alkaloid to the list of febrifuges; it is obtained from the well-known evergreen shrub, *Phyllerea latifolia.* It was known, before the researches of Dr. Jachelli, as a cooling astringent, but it is now found to possess the same active anti-periodic properties as others of its class, the ash, the olive, etc.

An extensive series of experiments have been made since the year 1825, on the action of this alkaloid in agues, by Dr. Jachelli. He has compared its operation with that of—1st, a powder of the young leaves and twigs, in doses of 30 grains during the intermission; 2dly, a simple decoction of the plant to 60 of water, down to one-third, and given in large doses also during the intervals; 3d, with a compound decoction formed by adding 30 minims of dilute sulphuric acid to the preceding. The sulphate, in doses of from 12 to 15 grains during the apyrexia, has evinced its superior activity over other preparations of the phyllerea; thus of 20 patients treated witn the sulphate, 20 were cured; of 13 to whom the powder was administered, 11 were cured; of 18 to whom the compound decoction was given, 14 were cured; of 16 who took the simple decoction, 7 were cured.—*Bulletin Général de Thérapeutique.*

ANIMAL CHEMISTRY.

Analyses of Venous Blood. By Dr. Day.—Numerous analyses of healthy venous blood have been instituted during late years. Those of Lecanu, Denis, Simon, Nasse, and Becquerel and Rodier, are regarded as amongst the most accurate, and I believe that the discrepancies existing between them are merely those which must naturally arise from the differences in the methods of analysis pursued by these chemists. I believe it to be utterly impossible to determine a formula for the composition of healthy blood that would serve as a standard by comparison with which we might detect absolute deviations in other forms and specimens of blood; for not only may we conceive that there are changes in the blood of the same individual at different times of the day, according to the amount of pabulum poured into the circulating system, and that different methods of life, and various modes of nourishment would cause some changes, but we know by actual analysis, that sex, age, and temperament, do impress peculiar changes on it.

All, then, that we can venture to do is, to give the *maxima, mean* and *minima* values of the different constituents of healthy blood, and, in order that they may be at all trustworthy, they should be deduced from a large number of analyses.

The following table is drawn up by Becquerel and Rodier, from the analyses of the blood of eleven men, all of whom were considered to be in perfect health, and varying in age from 21 to 56 years:—

	Mean.	Maxima.	Minima.
Density of defibrinated blood, -	1060·2	1062·0	1058·0
Density of serum, - - -	1028·0	1030·0	1027·0
Water, - - - - - -	799·0	800·0	760·0
Solid constituents, - - -	201·0	240·0	200·0
Fibrin, - - - - - -	2·2	3·5	1·5
Fat, - - - - - -	3·2	6·6	2·0
Albumen, - - - -	69·4	73·0	62·0
Blood-corpuscles, - - -	141·1	152·0	131·0
Extractive matters and salts, -	6·8	8·0	5·0
1000 parts of incinerated blood contained—			
Chloride of sodium, - -	3·10	4·20	2·30
Other soluble salts, - -	2·50	3·20	2·00
Earthy phosphates, - -	0·33	0·70	0·22
Iron, - - - - - -	0·56	0·63	0·51

The composition of the blood of the healthy female, as deduced from eight analyses, is given in the following table:

	Mean.	Maxima.	Minima.
Density of defibrinated blood,	1057.5	1060·0	1054·0
Density of serum,	1027·4	1030·0	1026·0
Water,	791·1	813·3	773·0
Solid constituents,	208·9	227·0	187·0
Fibrin,	2·2	2·5	1·8
Fat,	2·2	5·7	2·0
Albumen,	70·5	75·5	65·0
Blood-corpuscles,	127·2	137·5	113·0
Extractive matters and salts,	7·4	8·5	6·2
1000 parts of incinerated blood contained—			
Chloride of sodium,	3·90	4.00	3·50
Other soluble salts,	2·90	3·00	2·50
Earthy phosphates,	0·35	0·60	0·25
Iron,	0·54	0·57	0·48

From these tables, Becquerel and Rodier maintain that the influence of sex is so great, especially in reference to the amount of water and of blood-corpuscles, that, in order to arrive at any correct conclusions respecting the deviations of morbid blood from the healthy standard, diseased male and female blood must be always contrasted with the respective male and female blood in a state of health.—(*Med. Gaz.*)

On the Chemical Statistics of the Human Body.—(Paris Academy of Sciences.)—M. Regnault presented a communication from M. Barral, entitled "On the chemical statistics of the human body." M. Barral states in this communication that he has endeavored to resolve, by a direct analysis of the food and the evacuations, the following problem:—"the quantity and the elementary composition of the food, solid and liquid, taken per diem being known, to determine the quantity and the elementary composition of the evacuations, perspiration, and other excretions, so as to ascertain the gains and losses of the human body." The following are the conclusions and the *résumé* of his experiments:

1. He found that the carbon burnt each day by the oxygen of respiration was identical in proportion to that arrived at by another mode of experiment by MM. Andral and Gavarret; but to the causes of variation indicated by those authors he adds a new one:—the quantity of carbon consumed in winter is about one-fifth more than that consumed in summer.

2. The quantity of nitrogen contained in the food is greater than that of the evacuations, so that a part of this gas must be exhaled by the perspiration. This portion rises as high as one-third or one-fourth of the nitrogen taken into the system, but it is only one-hundreth part of the carbonic acid produced. In a healthy state of the system, the relation of carbon to nitrogen is about 100 to 8.

3. The hydrogen and oxygen are not found in the exact proportions for the formation of water; there is always in the food an excess of hydrogen which may be considered as in part burnt by the oxygen of respiration. The hydrogen thus burnt is on an average equal to one-third of the carbon transformed into carbonic acid. This hydrogen burnt in respiration is not all the hydrogen contained in the food: the evacuations are richer in hydrogen than the food, in the proportion of about 8 to 5.

4. The oxygen necessary for the transformation into carbonic acid and water, of the carbon and hydrogen of the food burnt in respiration, is to the food as 1 to 3.

5. The water, as well natural as that formed as a consequent of respiration and digestion, is on the average 67-100ths of the food, increased by the oxygen of the atmosphere combined with it. The water of perspiration is generally more than that of the evacuations. In old people, however, the water of perspiration is reduced to one-third of the water of the urine and of the excrements.

6. In three experiments a larger quantity of chlorine was found in the food than in the evacuations; in two other experiments a small excess of chlorine was found in the evacuations. A certain quantity of chloride of sodium, amounting almost to one-third of the quantity taken, does not pass off by the evacuations.

7. The chemical statistics of the human body may thus be stated :—

Taken into the system—

Liquid and solid food, - - - - -	74·4
Oxygen, - - - - - - -	25·6
	100·0

Passed out of the system—

Water of respiration, - - - - -	34·8
Carbonic acid, - - - - - -	30·2
Evacuations, - - - - - -	34·5
Other losses, - - - - - -	0·5
	100·0

In general the perspiration is to the evacuations as 2 to 1; but in old people the evacuations exceed the perspiration.

In deducting from the total quantity of heat produced each day, the heat taken by the evaporation of the transpired water, that taken by the air of the respiration, and lastly, that taken by the food and the evacuations, it is found that on an average the heat lost by radiation is 30,000 per diem, or 1250 per hour, in summer, and 42,000 per diem, or 1750 per hour, in winter. The following will serve to indicate the heat taken by the body, and the heat lost by radiation, etc. :—

Heat taken by the evaporation of the water of perspiration,	24·1
Heat carried off by the air of respiration, - -	7·3
Heat taken by the food, - - - -	2.2
Ditto by the evacuations, - - - -	1·8
Heat lost by radiation and by contact, - - -	64·6
	100·0

[*Med. Gaz.*

TO READERS AND CORRESPONDENTS.

We particularly request the attention of our readers and contributors to the Prospectus on the cover of this number. The Collaborators' list following it, is, owing to want of time, necessarily incomplete. It will be added to in our next number.

From our country subscribers we are desirous of receiving accounts of endemic and epidemic diseases—a branch of medicine, the literature of which, there is good reason to believe, is too much neglected by the profession generally.

In our next number we shall, as far as possible, give our readers a full account of the success of the different modes instituted for the treatment of Cholera, both in Europe and this country, during the present epidemic.

To Publishers.—The attention of publishers is called to the fact that this Journal changed publishers with the March number. This notice has become necessary from the circumstance that considerable delay has of late taken place in the reception of recent publications. They will please direct, pre-paid, to the Editor of the New-York Journal of Medicine, &c. care of D. Fanshaw, 575 Broadway,

Western Journal of Medicine and Surgery.—Will the editor of this Journal please notice, that in our acknowledgement of exchanges received, not a number of his journal has come to hand since May, 1848.—Our Journal has been sent regularly.

The following publications have been received:

A Practical Treatise on the Domestic Management, and most Important Diseases of advanced Life. With an Appendix containing a series of cases, Illustrative of a new and successful mode of treating Lumbago, and other forms of Chronic Rheumatism, Sciatica and other Neuralgic affections, and certain forms of Paralysis. By George E. Day, M. D., Fellow of the Royal College of Physicians, and Physician to the Western General Dispensary. Philadelphia: Lea and Blanchard, 1849; 8vo. pp. 226. (From the Publishers.)

Anæsthesia: Or the Employment of Chloroform and Ether in Surgery, Midwifery, etc. etc. By J. Y. Simpson, M. D. F. R. S. E. Professor of Midwifery in the University of Edinburgh, Physician Accoucher to the Queen in Scotland, etc. etc. Philadelphia; Lindsay and Blakiston, 1849; 8vo. pp. 248. (From the Publishers.)

Clinical Midwifery. Comprising the History of five hundred and forty-five Cases of Difficult Preternatural, and Complicated Labor. By Robert Lee, M. D., F. R. S., Fellow of the Royal College of Physicians, London; Physician to the British Lying-in Hospital; Lecturer on Midwifery at St. George's Hospital, etc. etc. First American, from the second London edition. Philadelphia, Lea and Blanchard, 1849. 12mo. pp. 238. (From the Publishers.)

Treatise upon the Nature and Treatment of Morbid Sensibility of the Retina, or Weakness of the Sight. Being the Dissertation to which the Boylston Medical Prize, for 1848, was awarded upon the following question,—"What is the Nature and best Mode of Treatment of that affection of the Eyes, commonly called Morbid Sensibility of the Retina?" By John H. Dix, M.D., M.M.-S.S. Boston: William D. Ticknor and Co. 1849. 12mo. pp. 146. (From the Publishers.)

The Maternal Management of Children, in Health and Disease. By Thomas Bull, M. D., Member of the Royal College of Physicians; Author of "Hints to Mothers," for the management of their health, etc. etc. From the third London edition. Philadelphia: Lindsay and Blakiston, 1849; 12mo. pp. 406. (From the Publishers.)

Practical Pharmacy: The Arrangements, Apparatus and Manipulations of the Pharmaceuticle Shop and Laboratory. By Francis Mohr, Ph. D., Assessor Pharmacæ of the Royal College of Medicine, Coblentz; and Theophilus Renwood, Professor of Chemistry and Pharmacy to the Pharmaceutical Society of Great Britain. Edited, with extensive additions, by William Proctor, Jun. Professor of Pharmacy in the Philadelphia College of Pharmacy. Illustrated by five hundred engravings on wood. Philadelphia: Lee and Blanchard, 1849; 8vo. pp. 576. (From the Publishers.)

Beneficence of Design in the Problem of Evil, Vindicated by the law of Causation in the Physical Construction of Matter. By a Journeyman. Tenth Bridgewater Treatise. New-York: Leavett, Trow, and Co. 1849; 12mo. pp. 213. (From the Publisher.)

State of the New-York Hospital and Bloomingdale Asylum, for the year 1848. New-York, 1849; 8vo. Royal pp. 28.

Summary of the Transactions of the College of Physicians of Philadelphia, from February 6th, 1849, to April 3d, 1849. Philadelphia: 8vo. pp. 70. (From the Committee.)

Transactions of the Medical Society of the State of New-York. Vol. VII. Part 3. Albany: 1849, 8vo. pp. 78. (From the Society.)

Report of the Standing Sanitory Committee of the Board of Health of the city of New-York, on the subject of Asiatic Cholera, at present prevailing at the Quarantine Establishment of New-York. At Staten Island. Second Edition. New-York: 1849; 8vo. pp. 32. (From Dr. J. B. Beck.)

Tarnsactions of the Medical Society of the State of New-York. Vol. VII. Part 3rd. Albany: 1849; 8vo. pp. (From Dr. J. B. Beck.)

Letters upon Cholera. By Frank A. Ramsey, M. D. Knoxville, Tennessee: 1849; 8vo. pp. 30. (From the Author.)

Researches upon the Vital Dynasties of Civil Government. By Bennet Dowlen, M. D. Corresponding Member of the Academy of Natural Sciences of Philadelphia, etc. etc. Reprinted from the New-Orleans Medical and Surgical Journal. New-Orleans: Weld and Company, 1849; 8vo. pp. 29. (From the Author.)

Treatise on the Dislocations of the Shoulder. By George C. Jervis, M. D. Author of Lectures on Fractures and Dislocations, etc. etc. Together with important cases illustrating the benefits of the Adjuster. Compiled by George Kellogg, A. M. Birmingham: 1848; 8vo. pp. 32. (From the Author.)

Fracture Tables. Showing the results of Treatment of one hundred and thirty-six cases. By F. H. Hamilton, M. D., Professor of the Principles and Practice of Surgery and of Clinical Surgery in the Medical Department of Buffalo University. Reprinted from the Buffalo Medical Journal. Buffalo: 1849; 8vo. pp. 8. (From the Author.)

A Case of Carotid Aneurism, and some remarks on theDiagnosis of that Disease, published in the Southern Medical and Surgical Journal, with Dr. Paul F. Eves Comments thereon. And a Reply by James M. Green, M. D. Macon: 1849; 8vo. pp. 56. (From the Author.)

A Paper on Epidemic Meningitis. Read before the Medical Society of Montgomery. Alabama, in 1848. By S. Ames, M. D. 1849; 8vo. pp. 58. (From the Author.)

Sixth Annual Report of the Managers of the State Lunatic Asylum. Made to the Legislature, February 1st, 1849. Albany: 1849; 8vo. pp. 64. (From the Asylum.)

Report of the Pennsylvania Hospital for the Insane for the year 1848. By Thomas Kinkbrige, M. D., Physician of the Institution. Published by Order of the Board of Managers. Philadelphia: 1849; 8vo. pp. 50. (From the Hospital.)

Sixth Annual Report of the Managers of the State Lunatic Asylum Made to the Legislature, February 1st, 1849. Albany: 1849; 8vo. pp. 64. (From Dr. J. B. Beck.)

Report of the Eastern Asylum in the City of Williamsburgh, Virginia, 1848. Richmond: 1849; 8vo. pp. 31. (From the Asylum.)

Twelfth Annual Report of the Trustees of the Vermont Asylum for the Insane. September, 1848. Rutland: 1848; 8vo. pp. 12. (From the Asylum.)

Report of the Board of Visitors of the Boston Lunatic Hospital, in the matter of the Superintendent of that Institution, 1849. Boston: 1849; 8vo. pp. 17. (From Dr. Steadman.)

Thirtieth Congress—Second Session. Report No. 52, to the House of Representatives, on Patent Medicines. By Dr. Edwards, made February 6th, 1849; 8vo. pp. 33. (From Dr. Edward.)

Thirtieth Congress—Second Session, Report No. 114 to the House of Representatives, on the Memorial of William T. G. Morton, on Sulphuric Ether. By Dr. Edwards. Made February 23rd, 1849; 8vo. pp. 46. (From Dr. Edwards.)

Anniversary Discourse before the New-York Academy of Medicine, Delivered in the Church of the Crucifixion, November 8th, 1848. By James R. Manley, M. D. Published by order of the Academy. New-York: 1849; 8vo. pp. 36. (From Dr. J. B. Beck.)

Valedictory Address on the Sources and Benefits of Professional Earnestness. Delivered March 3rd, 1849, to the Graduates of the Medical College of Ohio. By John P. Harrison, M. D., Dean of the Faculty. Cincinnati: 1849; 8vo. pp. 15. (From the Author.)

Valedictory Address to the Medical Class of Transylvania University. By E. L. Dudley, M. D., Professor of General and Pathological Anatomy and Physiology. Published by the Class. Lexington: 1849; 8vo. pp. 15. (From the Author.)

Announcement of the Medical College of Evansville. Evansville, Indiana. Session of 1849-50. 8vo. pp. 7. (From the College.)

College of Physicians and Surgeons in the City of New-York. University of the State of New-York. Annual Catalogue of the Regents of the University and of the Trustees, Faculty, and Students of the College, 1848-9. New-York: 1849; 8vo. pp. 12. (From Dr. J. B. Beck.)

Catalogue of the Medical Department of Transylvania University, for the Session of 1848-49 With a list of the Graduating Class, and also, the Announcement for the Sesslon of 1849-50. Lexngton, Kentucky: 1849; 8vo. pp. 12. (From the College.)

The following Journals have been received in Exchange:

The American Journal of Insanity, edited by the Officers of the New-York State Lunatic Asylum, for April. (Quarterly. Utica, N. Y.)

The American Journal of the Medical Sciences, edited by Isaac Hays, M. D. for April. (Quarterly. Philadelphia.)

The American Journal of Pharmacy, edited by Joseph Carson, M. D. and William Proctor, M. D. Jr. for April. (Quarterly. Philadelphia.)

The New-Jersey Medical Reporter, and Transactions of the New-Jersey Medical Society, edited by Joseph Parrish, M. D. for April. (Quarterly. Burlington.)

The Medical Examiner and Record of Medical Science, edited by Francis G. Smith, M. D. and David H. Tucker, M. D., for March and April. (Mouthly. Philadelphia.)

The New-Orleans Medical and Surgical Journal, devoted to Medicine and the Collateral Sciences, edited by A. Hester, M. D. for January and March. (Bi-Monthly. New-Orleans.)

Southern Medical and Surgical Journal, edited by Paul F. Eve, M. D. for March and April. (Monthly. Augusta.)

The Charleston Medical Journal and Review, edited by P. C. Gaillard, M. D. and H. W. De-Saussure, M. D. for March. (Bi-Monthly. Charleston.)

St. Louis Medical and Surgical Journal, edited by M. L. Linton, M. D., John S. More, M. D., Wm. M. McPheeters, M. D. and Joseph N. McDowell, M. D. for March. (Bi-Monthly. St. Louis.)

The North Western Medical and Surgical Journal, edited by W. B. Herrick, M. D. and J. Evans, M. D. and Edwin G. Meeks, M. D. January and February. (Bi-Mouthly. Chicago and Indianapolis.)

The Western Journal of Medicine and Surgery, edited by P. Yandell, M. D. Not received since May last. (Monthly. Louisville.)

The Western Lancet and Hospital Reporter, edited by L. Lawson, M. D. and John P. Harrison, M. D. for March and April. (Monthly. Cincinnati)

The Ohio Medical and Surgical Journal, edited by John Butterfield, M. D. Not received ceived—November, January and March. (Bi-Monthly. Columbus.)

Buffalo Medical Journal, and Monthly Review of Medical and Surgical Science, edited by Austin Flint, M. D. for March and April, (Monthly. Buffalo.)

The Boston Medical and Surgical Journal, edited by J. C. V. Smith, M. D. Numbers for March and April received. (Weekly. Boston.)

The Annalist, a Record of Practical Medicine in the City of New-York, edited by N. S. Davis, M. D. for March and April. (Semi-Monthly. New-York.)

The Medical News and Library, edited by ———, for March and April. (Monthly. Philadelphia.)

The New-York Dental Recorder, edited by C. C. Allen, M. D. Dentist, for March and April.—(Monthly. New-York.)

The British-American Journal of Medicine and Physical Science, edited by Archibald Hall, M. D., L. R. C. S. E., for March and April. (Monthly. Montreal.)

Dublin Quarterly Journal of Medical Science, edited by ———, for February. (Quarterly.—Dublin, Ireland.)

Monthly Journal and Retrospect of Medical Science, edited by ———. Not received since May last. (Monthly. Edinburgh and London.)

London Medical Gazette or Journal of Practical Medicine, edited by ———, for December, January, February and March. (Weekly. London.)

The British Record of Obstetric Medicine, Surgery and Diseases of Women and Children, &c. &c. edited by Charles Clay, M. D. (Vol. 1st, for 1848.)

☞ Communications intended for publication, and Books for Review, should be sent *free of expense*, directed to the Editor of the New-York Journal of Medicine, care of Daniel Fanshaw, 575 Broadway, New-York. Persons at a distance may direct parcels, *paid* as above, under cover, to Lindsay & Blakiston, Philadelphia; or Wm. D. Ticknor & Co., Boston; or John Wiley, Paternoster Row, London. The attention of Correspondents is respectfully requested to the above, as the publisher is frequently subjected to unnecessary expense for postage and carriage.

All remittances of money and letters on the *business* of the Journal, should be addressed to the publisher.

The advertising sheet belongs to the business department of the Journal, and all communications for it should be addressed to the publisher, under whose exclusive control it is.

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Art. VIII.—Obstetrics: The Science and the Art. By Charles D. Meigs, M. D. Professor of Midwifery and the Diseases of Women and Children, in the Jefferson Medical College of Philadelphia; one of the Physicians of the Lying-in Department of the Pennsylvania Hospital, Vice-President of the Philadelphia College of Physicians, &c. &c. With one hundred and twenty-one Illustrations. Philadelphia, Lea and Blanchard, 1849: 8vo. pp. 671. 351

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1 Introductory Lecture to the Course of Materia Medica and Pharmacy, in the University of Pennsylvania. By George B. Wood, M. D. Professor of Materia Medica and Pharmacy, Philadelphia, 1848. 8vo. pp. 23. 364

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3 A Discourse on the Influence of Disease on the Intellectual and Moral Powers. Delivered as an Introductory Lecture at the College of Physicians and Surgeons, in the City of New-York. By Joseph Mather Smith, M. D. Professor of the Theory and Practice of Physic, and Clinical Medicine. New-York. 8vo. pp. 35. . . . 373

4 New-York University Medical Department. Hygiene: An Introductory Lecture. By Samuel Henry Dickson, M. D. Professor of the Theory and Practice of Medicine. New-York, 1848. 8vo. pp. 24. 375

5 New-York University.—Medical Department. Lecture on Obstetrics, and the Diseases of Women and Children. By Gunning S. Bedford, M. D. Professor of Obstetrics and the Diseases of Women and Children. New-York, 1848. 8vo. pp. 25. . . . 377

6 Introductory Lecture, delivered before the Class of the Medical Department of the St. Louis University Session of 1848. By James Blake, M. D. Professor of Special, General and Surgical Anatomy. St. Louis, 1848. 8vo. pp. 18. 378

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Encyclopædia Obstetrica: or, A Theoretical, Practical, Historical, Biographical and Critical Dictionary of Obstetrics, including the Diseases of Women and Children. Illustrated with numerous Wood Engravings. By Charles Clay, M. D. &c. &c. London, H. Renshaw; Manchester, Wm. Irwin, 1848. 8vo. pp. 32 pp. 32. Parts I. and II. . • . . 384

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THE NEW-YORK

JOURNAL OF MEDICINE.

FOR MAY, 1849.

PART FIRST.

ORIGINAL COMMUNICATIONS.

Art. I.—*Malignant Polypus of the Nose; Ligature of the Common Carotid Artery; Death with Cerebral Symptoms.* By W. H. Van Buren, M. D. Surgeon to Bellevue Hospital.

The method of statistical investigation, at present so greatly in vogue with those in pursuit of certainty in medicine, has been accused of fallacy, because, in the cases of Medical and Surgical practice on record, those of successful issue are always found to bear a much larger proportion to those whose result has been unhappy, than accords with the actual results of practice. In the present state of our knowledge, therefore, an unsuccessful result, fairly stated, is of more actual value to the compiler of statistics, in his search after truth, than a brilliant success; and personal considerations, should never be allowed to interfere with the interests of our science. In this spirit the following case is placed on record.

M. W——, a married woman, of moderately robust constitution, a native of England, 34 years of age, was admitted into Bellevue Hospital, November, 1848, with a very vascular encephaloid tumor filling the nasal cavities.

About eight years ago, whilst nursing her third child, she was attacked suddenly, and without any known cause, with a very profuse and obstinate epistaxis, which continued for five days before it was arrested, causing so much exhaustion that the patient was confined to her bed for several days.

Some twelve months after this, having meanwhile enjoyed excellent health, she was taken with an unusually violent headache, which lasted for two days, when a hæmorrhage again took place from the nose, which, although it was arrested in twenty-four hours, was much more profuse than on the former occasion. She fainted repeatedly during its continuance, and was confined to her bed for more than two months afterwards, by weakness from the loss of blood. About a month after the last hæmorrhage, the patient began to feel some uneasy sensations in the right nostril, which, in two months more became constant and annoying, and at the end of a year a tumor had made its appearance in the nostril, which she was advised to have removed. A small pulpy mass was accordingly brought away by the wire and canula, and followed immediately by a most violent hæmorrhage, which was only stopped by plugging the nostrils, after the loss, according to the statement of her surgeon, of more than three pounds of blood in five minutes. She was an invalid after this operation for more than six months, under medical care, during which time caustics, &c. were repeatedly applied to the tumor, which remained, however, very much in the same condition until she came to this country some four years since. From this time it gradually increased in size, encroaching on the nostril of the opposite side, and causing absorption of the neighboring bones. Two years ago a soft, fluctuating, conical swelling made its appearance over the *os nasi* of the right side—evidently a growth from the tumor within, the bone being absorbed by its pressure.

November 21st. Tumor has increased in size more rapidly of late, causing much pain over the right eye, uneasiness in the right side of the head, and ringing in the right ear. Patient's general health moderately good, although declining from the constant distress and consequent sleeplessness. She has not been in the habit of using opiates.

22d. Consultation on the propriety of ligature of right carotid artery. Agreed that it should be done as soon as possible, as the only means of palliating the progress of the disease. There is to-day considerable erythema around the external tumor at the base of the nose, with œdema of eyelids on both sides, excitement of the circulation, and increased pain of the head. No sleep last night. Patient is anxious to have anything done that promises even temporary relief. ℞ ol. ric. ℥i—to be followed after its operation by a full opiate. Cold lotion of lead and opium, and mustard pediluvium.

23d. More comfortable in every respect. An eschar the size of a sixpence has formed on the summit of the external tumor. Had some sleep. Ordered seidlitz powder, and light animal food. The tumor can be felt projecting backwards, through the posterior nares, by the finger in the fauces, and can be seen anteriorily filling the cavity of the nose, and projecting slightly from the right nostril. Pressure upon the right primitive carotid causes visible diminution in the bulk of the tumor, and stops the painful throbbing which the patient always feels in it.

24th. Comparatively comfortable, although she has slept none; has been talking rather wildly at times, during the night. No fever, and the œdema and redness have disappeared from face. The eschar on the external tumor has fallen, and a bright and vascular fungus is protruding through the opening. There is a constant and free watery discharge, both from the nostril and the external fungus.

1½ P. M. Ligature applied to the right primitive carotid, with immediate relief to the tensive throbbing pain of the tumor and that over the right eye. This was replaced by a new and peculiar pain in the right side of the head, which caused some complaint, accompanied by a marked pallor of face. The tumor shrank palpably in volume. Patient was put to bed moderately comfortable, and in good spirits, with directions that she should have light nourishment, and an anodyne towards evening if the pain should increase.

25th. Patient had a full dose of morphine before midnight, and slept several hours. Towards morning had a slight chill.

2 P. M. Pulse 120, full and tense. Much pain complained of in back of head, right shoulder, and left side below the short ribs. Soreness of throat. V. S. ad ℥xij with relief to pains. Took a full anodyne at 4 o'clock P. M. During the night complained of considerable pain, and talked wildly at times.

26th. 10 A. M. Patient has been partially insensible since 5 o'clock this morning. She can be aroused, but is unable to articulate, or to swallow fluids except with extreme difficulty.

Pulse 100–110, and varying slightly in force, as well as in frequency. Pupils contracted—equally; sensible to light. Skin cool; moist. Breathing regular, and slightly convulsive. Slight duskiness of surface. Sinapisms to legs; blisters to thighs. There is, apparently, partial hemiplegia of the left side.

27th. Same condition; hemiplegia undoubted, although incomplete. Pulse 110 to 130; varying in frequency and force. Has passed urine voluntarily. Bowels have not moved. She has been partially aroused several times, but on the whole is evidently sinking. Blister between scapulæ; a mixture of croton oil and olive oil to be applied to the mouth occasionally with a feather.

She continued sinking and died at midnight, 82 hours after the ligature of the artery.

Post mortem examination twelve hours after death. Appearance of body slightly changed; contraction of right side of chest. Tumor shrunken very considerably since death; it is now about one-third of its original size. *Brain* first examined. Membranes healthy. Amount of serum in arachnoid cavity, and ventricles, normal. Appearance of blood-vessels at base of brain natural. On section of its substance, the outlines of the cineritious matter of right hemisphere were evidently less distinct and well marked than of the left, and its color lighter. This was particularly noticed in the *corpora striata.* In the *corpus striatum* of the right side, and anterior to it, the cerebral substance is very considerably softer than in corresponding portions of the left hemisphere. No other evidences of disease were detected within the cranium. In the *thorax* numerous old and strong pleuritic adhesions were found on right side. The lungs showed decided hypostatic congestion, and contained a number of *obsolete (cretaceous) tubercles;* otherwise healthy. *Heart* slightly hypertrophied. *Liver* healthy. *Gall* bladder distended, and containing a number of biliary concretions.

Uterus presented several hard, shot-like tumors, containing fluid, situated around the inner edge of the os. These appear to be enlarged *glandulæ Nabothi,* and present the appearance described by Montgomery, as indicating the first stage of uterine cancer.

The tumor, which was removed entire, appears to have originated beneath the mucus membrane covering the right inferior turbinated bone, the substance of which had entirely disappeared. From this point it extended into the antrum of the same side, upwards into the ethmoid cells, pushing the septum narium in contact with the turbinated bones of the opposite side, where the healthy mucous membrane had contracted firm adhesions, protruding into the pharynx posteriorly, and through the *ossa nasi* and integuments of the face anteriorly, everywhere causing absorption of the bones which opposed its progress.

The substance of the tumor, examined beneath the microscope, appeared to consist almost entirely of elongated, spindle-shaped, or caudate corpuscles, containing one or more nuclei.

The parts in the vicinity of the point at which the ligature was applied to the artery were carefully dissected. Everything here presented a healthy and favorable appearance; the wound was in a great measure consolidated by the effused fibrine in which the ligature was imbedded; the nervous trunks (the *descendens noni* and *par vagum)* were free from any morbid appearance. A clot occupied the artery, from the bifurcation of the innominata to the point of ligature, which was evidently adherent to its lining membrane; above the ligature another clot, plainly of more recent formation, extended to the bifurcation of the artery, and two or three lines into the internal carotid.

The above case presents an interesting example of a disease of rather unfrequent occurrence. Cancer of the nasal cavities, generally known as "malignant polypus," is liable to assume all the varieties which characterize the cancerous deposit in other parts of the body, although the encephaloid form of the disease occurs by far the most frequently in this situation. The encephaloid deposit varies greatly, both in its degree of vascularity, and in the rapidity of its growth. In the present instance the progress of the malady was unusually slow, whilst the vascularity of the tumor was excessive—profuse hemorrhages preceding apparently the development of the disease, and accompanying its growth, unprovoked by any interference. This latter circumstance seemed to warrant the hope that, diminishing its supply of blood would impede the growth of the tumor. The characteristic appearance of the fungus which protruded through the integuments of the face a few days before the operation, together with the microscopic structure of the tumor, and the co-existence of incipient cancer of the uterus, render the nature of the disease unquestionable; whilst the presence of obsolete tubercles in the lungs furnish farther evidence against the antagonism of tubercle and cancer, asserted by some pathologists.

The effect produced by the ligature of the primitive carotid upon the brain, which was evidently the immediate cause of death, furnishes another fact of interest in connection with the pathology of this organ, and illustrates one of the dangers of the operation, which is, perhaps, too often overlooked.

January, 1849.

Art. II.—*Case of Abdominal Tumor.* By B. W. M'Cready, M. D. One of the visiting Physicians to Bellevue Hospital.

Anne G——, aet. 23, born in Scotland, was confined of her second child, on the 24th of September, in the Bellevue Hospital. At her confinement she lost a good deal of blood, and was somewhat blanched and reduced by it; at the end of the first week she was so far recovered as to be up, and about the ward. Two weeks after her confinement she complained of pain in the side, and on examination the house physician detected a tumor in the right iliac region, somewhat tender on pressure.

October 9th, I found the patient a large, well-made young woman, anæmic in appearance, with a full, quick, compressible pulse, beating about eighty times in a minute, and a moist skin. The bowels were regular, tongue clean, and the appetite indifferent, and there was present an offensive, yellowish discharge from the vagina. On uncovering the abdomen, which was large and flaccid from her recent confinement, a tumor was at once evident low down in the right side, its greatest prominence being about midway between the flare of the ilium and the umbilicus. On examination it was found to extend from about the level of the superior spinous process of the ilium, towards the inner part of the groin. With some effort the fingers could be crowded alongside the flare of the ilium into the iliac fossa; inwards the tumor extended as far as the median line, the umbilicus being near its upper and inner angle; low down it was impossible to ascertain its extent, on account of the resistance of the rectus muscle. The tumor appeared deep-seated, was moveable to some extent, hard and resisting, and presented no evidence of fluctuation. It seemed compressed laterally, and was oblong in shape, the long diameter extending obliquely from above, downwards and inwards. Percussion over it was perfectly dull. About the tumor there was a good deal of circumscribed œdema of the cellular tissue, and this, with the considerable amount of adipose matter, rendered the examination very difficult.

The finger, on being introduced into the vagina, found the parts natural, and without increased heat or swelling. A sudden tap upon the tumor, while the finger was on the os uteri, caused a quick movement of the uterus. When the finger was introduced into the rectum, everything seemed normal. Pressure on the tumor caused some pain, but the tenderness was not very great. The right foot and ankle were somewhat œdematous.

The patient denied ever having had any rigor or feverishness, and she had never noticed the tumor, though it was of considerable size, until it was discovered by the house physician. She complained of debility, and her manner was quick, nervous and agitated. From the date of the first examination the tumor gradually became more prominent and increased in extent, particularly downwards and inwards, towards the groin, and outwards towards the ilium. About the 16th of October it was evident that the tumor contained fluid. At the mediam line on the same level as before mentioned, it seemed to dip down suddenly and deeply into the cavity of the abdomen, not passing at all the median line. Outward it extended most towards the ilium, downward it was evident that the tumor approached close to the inner part of the groin. It seemed to be attached to the anterior wall of the abdomen, and to have a disposition to point externally, still the thickness of the integuments and cellular tissue over it was very much in the way of forming a satisfactory conclusion regarding its nature. On one occasion Anne had felt a slight rigor, and there existed some tendency to nocturnal perspiration. On this last account, as well as for her impaired appetite, she had been directed to take fifteen drops of the aromatic sulphuric acid, three times a day, in two ounces of bitter infusion.

At this time she complained of slight cough, and the respiration was somewhat quickened, but the pulse still was calm and moderate in point of frequency, though on two or three occasions it was observed to be a little accelerated. On auscultation a sibilant rhonchus was heard extending over the whole chest. In addition to her former medicines, an expectorant mixture, containing a little wine of ipecac was ordered. Her strength seemed somewhat better, the tenderness over the tumor was nearly gone, and on one occasion, for the first time since the tumor was discovered, she rose and walked, though feebly, and with assistance, about the ward.

On the evening of Tuesday, the 22d, the house-physician found that Anne, who had in the earlier part of the day been very comfortable, but whose spirits had for some time been greatly depressed, complained of more difficulty of breathing than common. In the morning this had increased considerably; there were signs of effusion into the cavities of both pleuræ. By direction of the house-physician, the posterior part of the chest was covered with dry cups. On my visit at 1 P.M. the patient was sitting up in bed, the body somewhat inclined forward, breathing with difficulty and rapidly, the respirations being fifty-five in a minute, and the alæ of the nostrils dilating with each inspiratory movement. The countenance was pale, of a leaden hue, and slightly swollen. The hands, and the lower extremities, were œdematous. The tongue was clean, the pulse 116, and feeble, and the skin cool and perspiring. On percussion the chest was found perfectly dull on both sides, as far as a line just below the lower edge of the scapula, and a loud moist subcrepitant rattle was heard wherever the air penetrated.

The patient was directed to have a large mustard poultice applied over the chest, and to take ¼ of a grain of elaterium every half hour, until the bowels were freely moved. The respiration gradually became more and more difficult, the skin cold, the pulse smaller and more frequent, till about 2 o'clock of the morning of the 22d, when she expired.

Post mortem examination eleven hours after death. Body well proportioned and full. Cellular tissue of the extremities, and over the tumor infiltrated with serum. Head not examined. Chest—both pleural cavities were filled with serum. The lungs were extensively œdematous. The pericardium was distended with serum, and the heart itself was at least one half larger than natural ; the cavities were somewhat enlarged, but in other respects it was natural. On removing the integuments from the abdomen, a drop of pus exuded through a minute opening, showing the tumor to have been an abscess, which had nearly made its way through the anterior wall of the abdomen. On opening the cavity of the abdomen, the tumor at first seemed as if it were exclusively in its anterior walls, to which both the ovaries, and the fundus of the uterus were adherent. The body of the uterus was elongated, and appeared as if the adhesions which existed had been formed when that organ was enlarged ; and that afterwards, although it had become contracted in its other dimensions, it had been unable to descend into the pelvis. The right ovary, too, was adherent about an inch above the level of the ovary of the other side. The whole of the tumor being removed, together with the uterus and the ovaries, the abscess was laid open. It was found to be in the thickness of the muscular layers of the anterior paries of the abdomen, which were confounded and lost in its walls. The cavity was irregular, lined with a flocculent membrane and contained about six ounces of offensive, thick, homogeneous pus. From the under surface of the abscess, that looking towards the cavity of the abdomen, a sinus, into the commencement of which the end of the little finger might be introduced, led inwards and downwards, becoming smaller as it descended, and terminated beneath the peritoneal lining, within the substance of the fundus of the uterus. The veins leading from the uterus were exceedingly enlarged, and one of them contained a fibrinous clot, almost destitute of coloring matter, not adherent to its walls, and about three inches in length. The liver, on being cut into, gave out a large quantity of bloody serum.

This case is interesting, not only from its rarity, but from the difficulty which attended its diagnosis. When first discovered, several of the medical gentlemen who saw the tumor believed it to be ovarian, and though this opinion had to be given up, as the disease became more developed, its precise nature was only ascertained on post-mortem examination. A part of this difficulty arose from the infiltrated condition of the cellular tissue over the tumor, and from the thickness of adipose matter by which it was covered. These were so considerable as to prevent the surgeon who was consulted from making an incision into the abscess, and thus, perhaps, prolonging the life of the patient. The disease, in all probability, was originally a metro-peritonitis of limited extent, occurring soon after confinement. The inflammation glued the peritoneum, covering the fundus of the uterus, to the anterior wall of the abdomen, and matter forming in the substance of the uterus, perhaps, in one or more of the uterine sinuses, thus made its way to the surface of the body. In support of this view, it may be added, that the appearance and manner of the patient suggested the idea of the existence of phlebitis to several of the gentlemen who saw her, and that, during her illness, several cases of puerperal fever occurred in the ward.

Art. III.—*Report of a case of Tubercular Meningitis.* By Wm. H. Macneven, M. D.

The subject of this report was a little girl of nearly five years of age, of a fair, delicate complexion, dark hair and eyes, and rather tall and slender form. For about four months previous to my attendance, she had experienced a gradual decline of health, which was manifested merely by diminution of appetite, disinclination to play, and occasional complaints of headache.

These symptoms were very gradual and irregular, and attracted little more than passing notice, until toward the period of my attendance, which commenced on the first of March,

1847. The headache now became more urgent, it recurred regularly in the afternoon, and began to be attended with appearances of more or less febrile excitement. The pain, though usually affecting the head, did not invariably do so, but was occasionally referred wholly or in part to the left hypochondrium. Her bowels were sufficiently regular, though disposed to constipation. The urinary discharges were for a fortnight prior to my attendance a little less copious than natural, and had assumed within the same space of time a very dark, turbid appearance, to which the mother called my attention with considerable uneasiness. The deep brown tint presented by the urine was indeed peculiar, and I can compare it to nothing which would better represent its appearance than coffee, containing a small quantity of milk. A slight occasional cough was present, the existence of which had been observed only for a fortnight. The headache was strictly periodical, it came on daily about 1 o'clock, and was accompanied by much of the lassitude and febrile excitement of an ordinary, mild, intermitting fever. A very great remission regularly occurred about 6 o'clock in the evening; but considerable restlessness was manifested during the beginning of the night, and complete relief would not occur until after midnight, when her sleep generally became tranquil. In the morning she would awaken quite refreshed, return for awhile to her childish sports, and pass the forenoon free from any apparent indisposition.

The pulse during this period of the day, (the forenoon,) afforded the only unfavorable indication; it was preternaturally frequent. My attention was particularly struck with this circumstance, from observing that it prevailed during the absence of every other symptom of disorder; it did not fall below 120, and what was remarkable, maintained its frequency during this part of the day with perfect uniformity, whether the child, when examined, happened to be sitting or lying, awake or asleep.

An examination of the chest carefully made at the commencement of my attendance did not enable me to detect any abnormal sound in the respiration. The urine, which was heavily charged with mucus, I had the curiosity to test by heat and by nitric acid, but no trace of albumen was exhibited. The progress of the disease in connection with its treatment was attended with some very curious changes, the details of which are rendered interesting from the opportunity, which was finally afforded, of satisfactorily determining its nature. Before proceeding I will sum up very briefly all the morbid phenomena which had thus far characterized it—a very gradual decline of flesh, strength and appetite for a period of four months; headache, at first slight and irregular, but latterly more severe, periodical, and attended with some febrile excitement; preternatural frequency of pulse, occasional cough, very turbid condition of the urine, (the two last symptoms of recent date,) and the passage about three weeks previous to my attendance of a lumbricus.

The headache and occasional pain in the left hypochondrium could always be temporarily dissipated by the application of a sinapism to the dorsal portion of the spine. In commencing the treatment, irritation occasioned by worms in the intestinal canal, appeared to me to be the most probable immediate cause of disorder, and I accordingly directed for the first three days a vermifuge, which was followed by a dose of calomel and infusion of senna.

The alvine discharges gave no indication of the existence of worms, but were copious and natural, and a very satisfactory improvement seemed immediately to result from the treatment. Quinine was now administered in half-grain doses, three or four times during the early part of each day, with the effect of such improvement to the appetite, and such a complete removal of the headache and all attendant symptoms, that on the fifth day I discontinued my visits.

March 7th. The father called at my office from a walk, accompanied by his daughter on foot. She remained free from any indisposition, and continued to improve in strength and appetite; her countenance was, as usual, quite pale. Directed a combination of carb. of iron and rhubarb in small doses to be substituted for the quinine.

10th. Called in re-attendance. All former symptoms returned, has vomited twice, (the only instances in the progress of the case,) on both these occasions the sickness at the stomach was occasioned by the forcible administration of the rhubarb and iron, to which the little patient manifested a most unconquerable disgust. The muriated tincture was now substituted in small doses, and the quinine resumed. In the course of the three following days I was informed that the patient experienced more or less fever of a remitting type, the headache likewise became constant, attended with heat of head and sudden and irregular exacerbations of very acute pain; the fecal and urinary evacuations continued to be regular, and the morning pulse not to exceed 120. Apprehensive now of some insidious form of meningitis, I questioned the mother as to the reception by the patient of any previous injury to the head, and was informed that she had received a fall upon her back of some severity about the time her decline commenced, but whether the head had been injured by the fall was not known. Tinct. of iron and quinine discontinued, leeches directed to the temples, and a brisk cathartic administered.

On the following day, 14th, A. M. I found the fever and headache to have been completely relieved; skin cool, pulse 110, lower than at any time hitherto observed. Blister to nape of the neck. The relief thus obtained continued for two days, when there commenced a renewal of the same train of symptoms which were present on my first visit.

Dr. F. U. Johnston, whose opinion and advice I now availed myself of, saw the case with me in consultation on the morning of the 17th. The pulse had again resumed its former rate, and indeed, with the exception of an increased expression of languor and debility, and a frequent gaping, there was nothing to distinguish the present appearance of the case from that which it exhibited at the outset of my attendance. Dr. Johnston was disposed to refer the symptoms to an obscure affection of the brain or its meninges, and thought the case would probably prove to be one of meningitis of a tuberculous character. He thought, however, that the indications which the present state of the case presented, were to meet the increasing debility, maintain the free action of the kidneys, and keep the bowels soluble; and suggested the expediency of fulfilling these indications by the moderate use of wine-whey, and the employment, at the same time, of alterative doses of calomel and extract of taraxacum. For three or four days a singularly deceptive amendment attended this treatment; the patient experienced a remarkable return of strength and appetite, and had daily one or two natural fecal evacuations, with increased and copious discharges of healthy looking urine.

21st. Found the patient awake, lying very composedly in the cradle, the recent favorable condition to all outward appearances continued; she answered very intelligibly any questions, and expressed herself as free from uneasiness. But to my surprise, in the face of these deceptive appearances, I found an extremely small and thread-like pulse, of 160. The parents, on my entrance, had been greatly encouraged. Returning by 3 P. M. I witnessed, as anticipated, a most unfavorable change in the whole aspect of the case; great restlessness, accompanied by partial coldness of the extremities, and either an entire inability, or an extreme indisposition to articulate. The pulse had increased in frequency beyond accurate enumeration, and was not less than 190 or 200; the respiration had become very short and labored. Directions were given for the applications of sinapisms, artificial warmth, and the administration of brandy and water at short intervals. At 6 P. M. the time of day hitherto attended by such marked remissions, the patient's father called at my office to announce that his child, whom I had left three hours before, under the belief that she was morabund, had regained strength enough to sit up in her cradle, had spoken quite intelligibly to the persons about her, evinced no sense of pain or uneasiness, and had demanded and eaten with great avidity a half slice of bread and molasses. In less than an hour after this piece of intelligence, I was summoned hastily to the house, and received the following account: "Just after the father left the house the patient discovered so unusual a desire for food that she was taken from the cradle at her own request and seated at the tea-table; here, while in the act of eating a piece of bread, she almost completely lost the use of her left arm, and at the same time the ability to swallow. Her mother, in first noticing this circumstance, observed the child to make several unsuccessful attempts to grasp a slice of bread with the left hand, which she had just before been using, and on failing with the left hand, to seize and convey it to her mouth with the other hand, but again after several times greedily filling her mouth with food, she removed it each time with her fingers from complete inability to swallow." She was immediately reconveyed to her cradle, and was soon after seized with a partial convulsion, from which she had not fully recovered on my arrival. The muscles of the face only had been convulsed. I found her in a state of trismus, the lower jaw being still closed upon the upper, immoveable and much retracted; pulse so extremely small and frequent as to be almost imperceptible; extremities cold, skin bathed in perspiration; respiration labored; pupils somewhat dilated but moving freely under the influence of light; left arm and hand completely paralysed; the other hand was kept, by her, in constant motion, as if following and grasping at imaginary objects in the air. She appeared at the same time, to some extent, cognizant of objects and noises about her. Sinapisms and hot brandy fomentations were applied, and so soon as the jaws had sufficiently relaxed, a little brandy and water administered, which was swallowed with extreme difficulty. As night advanced she became very restless, but showed increasing strength, her speech finally returned, and for a short time she raved as one in a delerium. In the morning (22d) she had a natural evacuation of urine and fæces, recovered her intelligence, and was found to have regained, to a very considerable extent, the use of the paralytic arm and hand. In the course of the day she had three slight convulsions of short duration, confined to the muscles of the face—the first one of these was the most severe; the last one, which occurred about 2 P. M. I had an opportunity of witnessing, and observed that she did not appear entirely to lose all her consciousness. I directed the 24th of a grain of strychnia, (which was given by 3 o'clock,) to be repeated every three hours. On calling at 6 P. M. I found that no convulsion had since recurred, her speech had improved, her intelligence was perfectly good, and the senses of sight and hearing were unimpaired. Within one hour from this time a rapid and fatal collapse ensued, and the child died tranquilly without the return of the slightest spasm or convulsion of any kind.

Post Mortem, March 23d, nineteen hours after death, (made with the assistance of Dr. Sabine.)

The membranes of the brain, about the vertex, presented no abnormal appearance, except a very trifling effusion between the arachnoid and pia mater. On elevating the posterior part of the brain, for the purpose of removing it, it was found bathed in about one and a half ounces of serum, which filled the fossa of the occipital bone. On inclining the head backward and elevating the body sufficiently, about two ounces of serum flowed from the spinal canal. The pia mater at the posterior, and particularly at the base of the brain, presented a very vascular appearance; its cerebral surface here, over a circumscribed patch of one and a half inches in diameter, near the centre of the middle lobe of the right hemisphere, was found thickly studded with tubercles which lined the membrane throughout its various convolutions, and which were confined in a remarkable manner to this locality. At the centre and focus of this space a tubercle about half the size of a small pea was found imbedded in the surface of the brain, immediately around which, for a line or two, the substance was softened. A very few scattered tubercles could be traced anteriorily into the fissure of silvius, and one isolated miliarly tubercle occupied the very centre of the medulla oblongata. The substance of the brain, which was carefully examined, was found to be throughout quite healthy, with the exception of the very small softened portion above noticed; the ventricles were almost empty, and presented some appearances of venous congestion over the thalami optici and corpora striata. On examining the lungs they were found studded uniformly, throughout their whole extent, with gray miliary tubercles of a large size and apparently of very recent and rapid formation. The spleen was the seat of two separate tubercular deposites; its upper portion for the distance of two inches from its apex was converted into a uniform gray substance, presenting the appearance of recent infiltration; while below this was a separate concrete tubercular deposite, about the size of a hickory nut, white at its borders, and of a deep ochre color in the centre. The kidneys presented a remarkable pale mottled appearance, and when laid open, the cortical substance was found to be much paler, and to have encroached upon the tubular portion. The liver and other viscera were healthy.

Art. IV.—*Case of "Corroding Ulcer" of the Uterus.* By S. Conant Foster, M. D. Visiting Physician to Bellevue Hospital.

Mrs. Le P——, aet. 45, the mother of nine children, the youngest of which was six years of age, (besides two miscarriages, which occurred previous to the birth of the last child,) came under my care early in May, 1846, for a discharge from the uterus, under which her health had been failing for several months. For a few weeks before I first saw her, the discharge had been very profuse and fetid. Sexual intercourse produced pain, and was occasionally followed by a small flow of blood. There had been no hæmorrhage to any amount, however, and there was no tenderness on pressure over the pubis, and no pain, excepting the dragging pain in the back. Her countenance was sallow, and there was considerable emaciation, with loss of appetite and strength. The catamenia were regular.

Examination with the finger and speculum revealed a large ulcerated surface, involving both lips of the os uteri, red and deep, but without induration, and furnishing a very fetid, thin, ichorous discharge, which ran off freely through the instrument to the amount of one or two ounces. The vagina was pale, smooth and relaxed.

She was put upon the use of a chalybeate preparation, the ulcerated surface was freely touched with the per nitrate of mercury, and she was directed to use an injection of Labarraque's solution, (diluted,) two or three times a day. The cauterization was repeated (using sometimes the strong nitric acid,) once in two or three days for some months. Under these means the discharge diminished, and became more like healthy pus, the ulcer contracted and took on the appearance of healthy granulations, her countenance assumed a more healthy color, and she gained flesh and strength. After a time, however, this improvement passed off, and various other means were then resorted to, both general and local, frequently with temporary benefit, but never with any lasting amelioration. The greatest improvement took place while taking Donovan's liquor, which was carried to the extent of producing first the constitutional effects of mercury, and then those of arsenic. At this time the ulcer became so healthy in appearance as to flatter me with hopes of a cure. The chief dependence, however, throughout the case, was upon repeated cauterizations, which were no sooner discontinued than the health began to flag, and she ran down fast.

The ulceration gradually extended, destroying the entire cervix uteri, and passing into the cavity of the organ, to such an extent as rendered it very difficult to apply the caustics. At length she slowly sank, and died on the 20th November, 1847. During two months only, previous to her death, she had considerable pain, but this was never of a lancinating character, nor was it persistent. She never had hæmorrhage, and the catamenia continued regular until about three months before her decease. During the last two weeks of her life she passed both féces and urine per vaginum.

Autopsy.—The pelvic viscera were removed in one mass, and presented the following appearances. Nothing remained of the uterus but the upper third, the rest having been destroyed by the ulceration. This had, moreover, extended to the neighboring parts, forming an opening into both the bladder and rectum sufficiently large to admit two fingers. Fécal matter was found in the bladder, having passed through what had been the body of the uterus. The vagina was, to a very small extent, involved in the ulceration. There was no induration whatever, and no evidence of any heterologous deposit in the neighboring parts. What remained of the uterus was healthy. The surface of the ulcer was dark, having a *hæmorrhagic* appearance, and the edges thin and sharp. Portions of the ulcerated surface were examined microscopically by Dr. Stout, who found only blood globules and epithelial scales, but none of the *cells* supposed to belong to cancerous affections.

The other organs were carefully examined, and found to be perfectly healthy.

This appears to have been a genuine case of the "corroding ulcer" so well described by Sir Charles Mansfield Clarke. It seems to have been in this instance a *strictly local* affection, and to have destroyed life by the gradual exhaustion of a continued discharge. Its true character was recognized from the commencement, and it was treated with a view to *cure*, if possible. It seems reasonable to suppose that such treatment need not always be unsuccessful.

ART. V.—*Case of Placenta Prævia.* By C. L. MITCHELL, M. D. of Brooklyn, L. I.

Mrs. ——, thirty-five years of age, of nervous temperament and feeble health, the mother of several children, and now in the seventh month of pregnancy, was waked during the night by a sense of great general uneasiness, and discovered that blood was flowing profusely from the vagina. I was informed on reaching her bed-side, that she was seized in the manner mentioned about an hour previously; that the flow had continued without interruption, and was still abundant; that there had been no labor-pain, nor any previous hæmorrhages.

The pulse at the wrist was barely perceptible, the arms and legs were cold, and the face and lips pale; there was inability to raise the hands to the head, or to speak above a whisper without an effort; the respiration was irregular, and accompanied with a distressing sense of constriction under the lower third of the sternum. On examining per vaginum, the cervix uteri was found resting over the symphysis pubis, the os directed posteriorly and easily admitting the last phalanx of the index finger; and, though nearly an inch in thickness, soft and yielding. The blood was flowing from it at an alarming rate.

The vagina was immediately plugged, and the tampon supported by a firm compress carefully held against the os externum; the labia being separated for that purpose. Cloths wrung out of ice-water were applied over the lower half of the abdomen, and sugar of lead and opium administered in a full dose.

By this time the patient had become faint and restless, occasionally moaning, and evincing distress by feebly flinging up her hands and turning her head from side to side; the pulse at the wrist was indistinct; the respiration much restricted, and the voice almost inaudible. A few tea-spoonsful of brandy and water were given, but with some difficulty, in consequence of the degree of insensibility into which the patient had sunken.

No blood appeared externally after the introduction of the tampon. At the end of half an hour the compress was wet with a reddish serum, which continued to flow for some time longer, the pulse gradually improved in force and volume, showing that there was little or no internal hæmorrhage ; the partial insensibility still continued ; an increased uneasiness was manifested at regular intervals of two or three minutes, indicating the supervention of labor pains.

During the next hour the unpleasant symptoms mostly disappeared ; the patient's consciousness returned, the pulse became good, the extremities warm, the respiration easy, and labor pains regular and forcing. The dressing being incautiously held for an instant by the nurse, a portion of the tampoon was expelled, and after it a half pint of dense coagula. This opportunity was taken for another examination, when the os was found more accessible, thinner, and as large as a quarter dollar. A slight gush of blood took place, which was stopped at once by the re-application of the plug and compress.

There was now an interval of an hour, during which the patient lay apparently quiet and comfortable, except when disturbed by uterine pains of constantly increasing severity. In a short time, the compress being raised by every pain, it and the plug were removed, and the hand introduced to complete the delivery. The placenta was first encountered, and behind it, and partially enveloped by it, the small head of a fœtus. This was seized, and the ovum readily extracted, with the child enclosed in the unruptured membranes.

No unusual hæmorrhage attended or followed the operation. The mother recovered without untoward symptoms. The child was still born.

The feeble health of the patient previously, and the extent, suddenness and *continuance* of the attack, seemed to justify the use of the tampon notwithstanding the certainty that it would induce labor. The delay necessary to the efficient action of other remedies would have been attended with imminent danger to both mother and child, in no degree compensated for by the uncertain advantages that could arise from attempting to prolong pregnancy to the full term. For, if attempted, its accomplishment would be next to impossible; and if accomplished, the numerous hæmorrhages `that would in the mean while occur, *might*, at any time, destroy both mother and child, and *would* so exhaust the mother as to give her an insignificant chance of surviving the labor.

Art. VI.—*Extracts from the Reports of the Proceedings of the New-York Pathological Society.* (Selected and prepared by a Committee of Publication.)

Report on the Diagnostic Signs of Portal Phlebitis.

Wm. C. Roberts, M. D. *Reporter.* (Submitted December 23d, 1845.)

The Committee appointed at the last meeting of the Society to present a report detailing the principal diagnostic signs of Phlebitis of the vena portæ, respectfully submit:

That in the subject committed to their consideration there are two elements: first, the symptoms common to phlebitis in general, and, second, those appertaining to the inflammation of the particular vein, and the organs connected with it, viz. the spleen, liver, and indirectly and occasionally only, the lungs.

Phlebitis is of two kinds: sub-acute or adhesive, i. e. leading to obliteration of the vessel, and acute; or that which is attended with the formation of pus within its cavity. In the first or sub-acute variety there is but slight general indisposition, but little local pain and tenderness, the vein soon becoming firm and hard, as if it contained solid matter; and dropsy of the parts beyond the trunk, commonly ensues. There is reason to believe, however, that a form of this variety may exist, attended with high and sthenic inflammatory action, sometimes, though not necessarily, or even generally fatal. Dropsy occurs rapidly, and may, or may not subside when the establishment of a collateral circulation ensues. In the acute or suppurative variety, the symptoms are much more severe. The attendant fever is of a typhoid character, depending on the admixture of pus with the circulating fluids, and its deposit in other frequently distant organs, viz. the liver, lungs, brain, kidneys, spleen, joints, serous cavities, and muscles, whereby new foci of irritation are created, and new pus poured into the general circulation. According to Schœnlein, the typhoid phenomena are peculiar to pus, and as such pathognomonic of the suppurative variety. Another peculiarity is the occurrence of chills. They set in without regularity, so as to cause a continued remittent fever, resembling an erratic intermittent. Several chills may occur per diem, sometimes as many as four or five, and sometimes many days elapse without their occurring. In cases even where the veins of the liver are not inflamed, this organ, the lungs and the heart, nevertheless frequently take an important part in the characteristics of the disease. There is distension, and even pain of the right hypochondrium, bilious coated tongue, bitter taste in the mouth, nausea and even vomiting; and even icterode color of the skin, conjunctiva and urine, which becomes brownish red, and often black. These phenomena are the more marked, the nearer the affected vein lies to the liver. The cardiac symptoms consist in signs of inflammation of the right side of the heart, violent pulsation below the ensiform cartilage, violent oppression, great restlessness, and frequent inclination to syncope. These signs are most marked in inflammation of the veins above the diaphragm. In addition to the above symptoms your committee may mention the occurrence of profuse sweats, and occasionally very unnatural and copious discharges from the bowels.

Your committee now proceed to examine whether, symptomatologically the cases reported as inflammation of the portal vein were really instances of phlebitis. They are six in number, viz. Drs. Graves, Reynaud, Lambron, and Moses, each one; and Dr. Schœnlein two cases: of these, three were suppurative and three adhesive.

Of the cases of the suppurative variety. Lambron's patient at first had a natural pulse, and the tongue was white. In the course of a week it became dry, was loaded with a blueish crust, and the pulse had risen to 96. On the occurrence of pneumonia the pulse became hard and full; in two days after it began to sink, the pulse rising to 104, and being weak and compressible. In Schœnlein's first case there was at first violent fever, with burning heat of the skin, pulse 100, full and tense, urine dark and high colored. Tongue had a yellow coating; in the course of the disease the fever moderated for a time, then assumed a hectic character, strength rapidly and remarkably succumbed. In his second case the tongue at first had a yellowish brown coating, there was much thirst, pulse varying from 100 to 110, skin burning hot. The fever quickly assumed the typhoid form, the pulse ran up to 128, was weak and compressible, the tongue became brown and dry, and strength failed rapidly. Such is a description of the *fever*, in the three cases of the suppurative variety, which have been presented to the Society, and, in the opinion of your committee they show, that, although at first of a sub-acute or acute sthenic character, it is speedily changed into the typhoid form, thus coinciding with the usual phenomena indicated as belonging to phlebitis in general.

Respecting the chills, with suppurative variety: In Lambron's case, the patient, after suffering with some slight and obscure gastric symptoms, was seized with a shivering fit, which did not return under one week. Rigors then recurred frequently, easily simulating a regular intermittent fever. They then ceased to return at the end of another week. In Schœnlein's first case, the patient was seized about the sixth day with a violent shaking chill, which was repeated at uncertain intervals; on some days several occurred, and on one day as many as three: at one time they were absent for eighteen days. In his second case, chills did not set in till the fourth week, occurring at irregular intervals, sometimes two daily, and lasting more than an hour. She had only one interval of twenty-four hours freedom from chills, which then recurred, and continued daily up to her death, becoming more severe, so that some lasted for twelve hours, and recurred again after the lapse of scarcely six more. Here again we notice the characteristic phenomena of internal suppuration, which your committee would especially indicate to the society as a pathognomonic sign of the disease in question.

The third point of interest refers to the symptomatic evidences of a deposit of pus in adjacent or distant organs. In Lambron's case, about the twenty-second day, pain in the right side of the chest, cough, crepitant râle, and faint bronchial respiration were perceived. In Schœnlein's first case, no depôts took place in any organ. In the second, there was pain in the region of the spleen at an early date—the organ was found enlarged and tender about its hilus. Pain and tenderness existed about the liver. About the fifth week of the disease cough set in, pain in the chest, and circumscribed crepitant rattle was found in several places about the base of either lung. Respiration quickly became oppressed, cough more severe, and sputa rusty and bloody. These two cases, in the opinion of your committee, while they exhibit no evidences of the cardiac affection mentioned by Schœnlein, a fact which may depend upon the non-residence of the pus conveyed into that organ, within its cavity, satisfactorily display the common attribute of phlebitis, namely, the development in organs more or less distant from the seat of the phlebitis, of inflammation dependant upon the stasis within them of the products of the venous phlogosis. These stases are well known to the society under the name of metastatic abscess. The theory of the formation of these abscesses is so well explained by Dr. Budd, in his recent treatise on the Diseases of the Liver, that your committee have thought the paper worthy of being transcribed. "The globules of the purulent matter, mingled with the blood, are conveyed to the capillary vessels of the lungs, and it would seem, by becoming mechanically arrested there, excite each circumscribed inflammation and abscess. If any of the globules pass through the capillaries of the lungs, to the left side of the heart, they are sent in the arterial current to other organs, and, becoming arrested in the capillaries of these organs, create, as in the lungs, inflammations of limited extent, rapidly passing on to abscess." "If the seat of the suppurative phlebitis happen to be one of the veins that go to form the vena portæ, the pus it contains will be carried first to the liver, before it be conveyed elsewhere, and then the abscesses will be found alone, or in greatest numbers in that organ."

The non-occurrence of metastatic abscesses in one of these three cases, shows that they are not to be expected in every case of phlebitis, and even when certain bilious symptoms do occur in particular cases, as Schœnlein declares, they are not necessarily attributable to the presence of pus in the parenchyma of the liver, but form a characteristic phenomenon of the disease, independently of any local lesion, and are, therefore, of nature purely sympathetic. In proof of this, in Schœnlein's first case, in which there were no depôts of pus in the liver, the tongue constantly retained a yellow bilious coating, the urine was always dark brown, and impregnated with bile, the skin was at first yellowish, and became of a dirty green, and greenish, brownish, bilious and offensive matter was discharged from the stomach. The left lobe of the liver became swollen and tender. The value of this observation of Schœnlein's, however, in the opinion of your committee, is in this case diminished, by the consideration that it was one of inflammation of an hepatic vein, upon which circumstance the biliary phenomena may in part, if not wholly, have depended. All the three patients who were the subjects of the suppurative inflammation of the portal vein had profuse and viscid sweats; in Lambron's case there were passed dark green fluid stools, in Schœnlein's second case the stools were of a dark yellowish brown, mixed with much mucus. Schœnlein remarks that when the disease has lasted from four to six weeks, the stools often become black, tarlike, looking as if burnt, and often mixed with blood; and here again your committee would point out the close coincidence of the symptoms of these cases with those described as belonging to phlebitis in general.

Of the general symptoms of Portal Phlebitis. Of these but one, that seen by our fellow-member, Dr. Moses, was acute in its character, and as the patient was in a state of collapse during the three days that preceded her death, the symptoms indicated nothing pathognomonic of phlebitis; they were simply those of asthenia, but the previous history of the case, jaundice occurring after a fit of passion, fever, the rapid occurrence of œdema pedum, and ascites, with the enlargement of the superficial abdominal veins, might have suggested both the existence of obstructive disease of the vena portæ and cava, and that the closing symptoms in some degree depended upon venous inflammation, though obscured by the more immediate existence of a peritonitis. Your committee believe that the general symptoms are insufficient, in the commencement, to point out with certainty the existence of adhesive phlebitis: fortunately the fatal termination is neither certain nor speedy, and the progress of the case will, generally, ultimately lead to an approximative diagnosis. Schœnlein, whose name stands high in Germany, and, indeed, throughout Europe, as that of a most enlightened and accomplished practical physician, and to whom we certainly owe most of our knowledge of the disease which now occupies our attention, asserts, that the attending fever is of a peculiarly pungent, burning character, the causus of the ancients, and retains its inflammatory nature until the exudation of plastic lymph occurs within the vein. Then sudden distension, and swelling of the spleen sets in, because its blood cannot return back through the obstructed portal vein. Thus, in a few days, the spleen may reach the median line, and extend downwards, almost to the ilium. The enlargement of the spleen, even when not sufficient to appear beneath the ribs, may still be detected on careful percussion. Profuse hæmorrhages, also, are apt to occur from the bowels after the lapse of ten or twelve days, depending, also, as will readily be seen, upon obstruction of the trunk of the vena portæ. The blood may pass off in large quantities from the intestines, and all the signs of collapse from the loss of blood ensue. "The superficial veins of the abdomen also become enlarged and serpentine, in the endeavor to establish a collateral circulation;" facts remarkably exemplified in the more chronic cases of Stokes and Reynaud, and to some extent, in the acute case related by Dr. Moses. Your committee will take this opportunity of stating, that, in Dr. Watson's Lectures on the Practice of Physic, two cases of venous obstruction, attended with the development of the supplementary circulation on the superficies of the chest and abdomen, are related, and diagrams given illustrative of the fact.

Having pointed out the phlebitic nature of the cases of fatal venous inflammation, reviewed by your committee, they proceed to exhibit the local phenomena, in each variety, which may lead to the location of the disease in the particular vessel in question. These are, according to Schœnlein, pain in the middle point between the navel and ensiform cartilage, occurring spontaneously, occasionally becoming exceedingly severe, increased by pressure, and extending often along the tract of the veins of the spleen on the one side, which organ may be found tender, and along the tract of the vein towards the liver on the other side, which may also be found puffy and tender, and, at times, extending even backwards towards the spine. The pain, in the adhesive variety, is dull and aching, and, in the suppurative, severe, burning and gnawing. In Lambron's case, no mention is made of this central pain, but there was constant pain in the right hypochondrium, with exacerbations, which the patient compared to smart cramps in the bowels. Jaundice is apt to occur at an early period: in Lambron's case, which was sub-acute in its course, in the course of a few weeks: in Schœnlein's first case, in the course of a few days: in his second case, in a few hours, after a severe fit of anger and vexation, a mode of origin common to several cases of this kind, among others, that of Dr. Moses, in whom the jaundice displayed itself also immediately. In the case mentioned by Andral, in his clinique, the patient, after laboring for some time under symptoms of fever and gastro-enteritis, was attacked with pain and tension in the region of the liver, followed by jaundice. Reynaud's patient labored for more than twelve months under jaundice, accompanied by wasting of the flesh and prostration of strength. He had constant pain in the epigastrium and swelling of the feet; symptoms which, as Stokes remarks, would have generally been regarded as those of chronic hepatitis. To these evidences of hepatic disorders may be added the frequent presence of bitter taste, a yellow coated tongue, loss of appetite, hiccup, nausea, and vomiting, more or less vitiated bilious discharges from the bowels, and the presence of the coloring matter of the bile in the urine; pain, tenderness, and in some cases swelling in the region of the liver. In the patient seen by Dr. Moses, after the lapse of several months, the skin still retained an iceterode hue, the excretions were dark green and bilious.

Obstruction of the vena portæ leads almost necessarily to abdominal dropsy. It existed in the cases seen by Moses and Reynaud, both of which were cases of the adhesive variety. In those of the suppurative variety, reported by Schœnlein and Lambron, this did not occur, a fact which is of importance in the distinctive diagnosis of these two forms of phlebitis. We may remark in passing, that in Reynaud's case, there existed emaciation coupled with canine appetite, and Graves, in cases supposed to be of this kind, not verified, however, by post mortem examination, has observed the same thing; leading to the inference that the mesenteric and other abdominal veins take part in the process of absorption of the nutritive elements of the food from the intestines.

Such are the evidences which your committee have to exhibit, leading to the inference that these and all other similar cases of phlebitis, are in reality cases in which the veins of the liver are the seats of the particular lesion. In those cases (Reynaud's) in which anasarca has co-existed with the other symptoms, the cause has been found in the extension of the inflammation to the vena cava. Your committee feel bound to remark that, whereas, these prominent bilious symptoms attend upon the disease at its acme, some may be absent at its commencement: thus the tongue may be at first white, and only become yellow at a later period, and the bilious diarrhœa is usually preceded by constipation. The ages of the patients in four cases are mentioned. Lambron's patient was sixty-nine years of age, Dr. Moses' thirty-two, Schœnlein's thirty-three and twenty-six respectively. Of the five cases, in which the sex is given, three were males and two females.

The more important results, developed by the preceding report, your committee have endeavored to embody in the following corollaries:

1st. Phlebitis is of two kinds—acute, sub-acute or adhesive, acute and suppurative. In the first variety, generally, the symptoms, general and local, are of less intensity; in the second, they are much more severe, the fever is of a typhoid form, only, according to Schœnlein, met with in this variety, of which it is therefore pathognomonic.

2d. That, according to the same authority, the local symptoms are the same in both, but the febrile reaction and mode of death are different, and that in the adhesive form the early diagnosis is difficult if not impossible, and, at a later stage, only approximative.

3d. That chills always and only occur in the suppurative variety, causing the remittent form of fever, which is the natural type of the disease, to resemble an irregular or erratic intermittent, and are markedly indicative of the true nature of the case.

4th. That the six cases examined by your committee were instances of phlebitis, as shown by their accordance with the general symptoms of the disease, not less than by the post mortem examinations, three being of the adhesive, and three of the suppurative variety.

5th. That in the suppurative variety, symptoms of hepatic, splenic, pneumonic and cardiac diseases display themselves, which depend upon the deposit of pus by metastasis in the parenchymatous viscera: but this does not invariably happen, nor always depend upon the presence of transported pus when it does.

6th. That bilious phenomena may occur in general phlebitis, from this cause, without an inflammation of the veins of the liver necessarily existing: or that they may depend solely upon the latter cause, in the absence of purulent deposits in the hepatic parenchyma.

7th. That certain symptoms, as pain in the middle point between the navel and ensiform cartilage increased by pressure, extending along the tract of the splenic vein, and those of the liver, differing in each variety, or in the right hypochondrium only, jaundice, frequently a primary symptom, and resulting after fits of passion, a bitter taste in the mouth, a yellow coated tongue, vitiated bilious discharges, a bilious tinge of the urine, and dropsy, in the adhesive variety only, are the local signs which point to the existence of phlebitis in some hepatic vein, although, for reasons previously assigned, these are not in every case, characteristic nor uniformly present in the commencement of every case.

8th. That it is only in cases where plastic lymph is effused into the vein, that the distension of the superficial abdominal veins occur; and that neither this, nor the enlargement of the spleen with which it is so often associated, are pathognomonic of portal phlebitis, but may depend upon obliteration of other large abdominal venous trunks.

9th. That the fever of phlebitis, in general, is in both varieties, of the burning pungent kind; in the adhesive retaining its inflammatory character until the exudation of plastic lymph occurs; in the suppurative, soon assuming the torpid typhoid character, to which variety, also, the chills and metastatic abscess are peculiar.

10th. And lastly, that profuse and viscid sweats are among the distinctive evidences of suppurative phlebitis.

Case of Lithotomy in a Child—Anæsthesia—Death within forty-five hours after the operation.

By James R. Wood, M. D.

Dr. James R. Wood related the details of the following case of Lithotomy, in which he had recently operated. The patient, was a boy four years old, whom he saw two years since with stone; the disease was then of one year's standing. Being in a good state at that time, an operation was proposed, but the parents refused, and the case passed into the hands of a noted empiric, who promised to cure without an operation, and who attended him until within a week of the period when he, Dr. Wood, was called for the second time. He then refused to operate, as the boy was suffering from great vesical irritation, and passing much muco-purulent matter per urethra. The patient was ordered to be kept quiet, dieted, put on alkalies, and mucilaginous drinks, which course of treatment was pursued for five weeks, and with so much benefit that he was in a state suitable for the operation, which was then performed with his bisector (a modification of Professor Stevens.) Dr. Wood stated that he preferred the bi-lateral section of the prostate in children, but in adults the lateral; that in children it was impossible to cut with accuracy, inasmuch as there is nothing but the rudiments of the prostrate, and it is safer to use an instrument that is under the perfect control of the surgeon; that he had used Dr. Stevens' and his own bisector in children, repeatedly, and heretofore with uniform success; that he had seen it used by others in this city with the same success; and, that Dr. P. H. Wildman, of Georgia, formerly his pupil, had used it in about thirty cases, both of adults and children, also with uniform success.

Previously to the operation ether was administered, (by request of the friends,) in a cautious manner, by his friend Dr. Markoe, and the stone removed in a very few moments without any difficulty. Before the patient was removed from the table he vomited, and continued to do so, at longer or shorter intervals, until he died; but a moderate quantity of blood was lost, and the system received but little shock. In the evening the pulse was ninety, and firm, the surface natural, and the urine passing freely through the incision in the perineum; in a word, at this time, eight hours after the operation, he was doing as well as could be desired, with the exception of occasional vomiting, which occurred whenever the patient drank, or partook of food. On making his visit the next morning, he found that the boy had passed a comfortable night, with the exception of occasional vomiting, the pulse was 80, and natural, and the wound free and healthy.

In the evening it was found that the vomiting had continued during the day, and that he had been restless since noon while asleep. He was drowsy most of the time, and took but little notice of his friends and others about him; when awake his countenance was anxious, pulse 100, small, but not corded; there was borborygmus, and he complained somewhat of tenderness in the hypogastric region; the skin was cool, though otherwise natural. Ordered an emollient enema, and fomentations to abdomen, and in case he should appear to be sinking during the night, stimulants. He began to sink about midnight, and died between 7 and 8 o'clock the next morning, about forty-five hours after the operation.

Autopsy. The *Post mortem examination*, made before noon of the same day, showed no disease to account for death; the wound looked well, free, and nothing like infiltration was discovered. The viscera of the abdomen and thorax appeared healthy. The head was not examined. *The blood was universally fluid, and the color of port wine.* Bladder small, and very much thickened. The stone had been partially sacculated, and the parieties of the bladder was observed to be very thin at the point, where it was attached. Dr. Woods here exhibited the whole of the parts, showing the section through the perineum and prostate. Much conversation followed the relation of the case, in reference to the cause of death. Dr. Van Buren was not disposed to think the ether in fault. He had himself twice operated on children for stone, and had lately seen three cases, all of which did perfectly well under chloroform. Dr. Parker had operated for stone, under ether three times, and under a mixture of ether, two pints, and of chloroform one pint, in one case, and in three out of the four, successfully. In the fatal case, the patient rallied, and went on well for two or three days, then began to be restless, pulse rapid, pain in the shin, sleepless nights, vomiting and death at the end of ten days. There were old adhesions of the bladder, intestines, and peritoneum, and an abscess between the rectum and upper part of the bladder. Dr. Parker did not think that in this case (Dr. Woods') the anæsthetic had anything to do with the fatal result.

Dr. Wood stated that the case, related by himself, resembled one described by Mr. Fergusson in a recent number of the London Lancet, in which chloroform was used; that, lately in this city, three or four cases had proved fatal within as many months; that, in his own case, there was no pathological condition to account for death, it was evident that he did not die from the shock of the operation, inasmuch as there was complete re-action within a few hours after it; and, that the only suspicious thing in the case was the fluid state of the blood, and its color. He did not feel disposed to express an opinion as to the cause of death in the case related.

Cancer of Liver and Uterus, with Multilocalar Cysts of Ovary.

By J. T. Metcalfe, M. D.

The`patient from whom these specimens were taken was a single woman, a tailoress by trade, aged 40, who came under my observation, after having suffered from dropsical symptoms for eighteen months. Previously to this, her genral health had been very good.

The dropsy first showed itself in the abdomen, but gave no inconvenience for some time. By the advice of her attendant, she had been tapped, once in September, 1846, eleven months from the commencement of her illness, on account of great dyspnœa. At this tapping, about 24 quarts of clear fluid were evacuated, with great relief to all unpleasant symptoms. Notwithstanding tonic treatment, counter-irritation, diuretics, hydragogue cathartics, and the use of the prepartions of iodine, reaccumulation of the adominal fluid took place, and it was found necessary to perform paracentesis again, in April, 1847. About sixteen quarts of serous looking fluid, slightly yellowish in color, was discharged. I saw her at this tapping for the first time. The dyspnœa was very great—the abdomen exceedingly distended—the body generally emaciated, except the legs, which were much increased in size from serous infiltration. The countenance had none of the expression usually attributed to malignant disease. Nothing abnormal could be detected by physical exploration of the chest. In the right iliac region was a hard cake, apparently attached to the abdominal parietes; the limits of which could not be very well made out. The liver could not be detected below the right hypochondriac margin. Pain across the loins, and shooting from the hepatic region to the right shoulder had been a constant symptom during her illness. The bowels had for some time been costive. She had had little or no appetite, but had often been thirsty. From the time of her first tapping, she had rarely left her bed.

It was found necessary, again, to perform paracentesis in May, 1847, when several quarts of bloody serum, highly loaded with albumen, were drawn off. The operation was followed by irritative fever, the wound made by the trocar continued to discharge; and in three weeks she died comatose.

Autopsy, twenty hours after death. Thorax healthy. *Abdomen.*—The liver was nearly double its natural size.* The whole organ was studded with nodules of encephaloid matter, varying in size from that of a hazle-nut to that of a walnut. The uterus increased in size, contained on both its mucous and peritoneal surface many tumors of small size, filled with a soft, semi-fluid matter of a dirty grayish color, and peculiarly offensive odor. The os uteri was normal. Each fallopian tube, distended in parts, to an inch in diameter, was filled with a whitish fluid of creamy consistence. The left ovary was healthy.

The right ovary was totally changed in appearance, having degenerated in cysts, principally of a serous nature. One of these was found to have contained the fluid which had been evacuated by tapping. Its anterior wall, half an inch thick, was firmly adherent to the abdominal parietes. On its internal surface and in its substance were numerous nodules, similar to those described as existing in the uterus. This cyst was capable of holding a gallon, showing that its capacity had diminished considerably since the first tapping, when twenty quarts were discharged. The other cysts varied in capacity, some containing ℥vj. others not more than a drachm. The contents were serum, bloody serum, and serum apparently mixed with pus. The large cyst was filled with cacoplastic fibrine, in shreds. The paucreas was studded with schirrous tubera, not larger than a nutmeg.—*Sept.* 27, 1848.

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* Its upper surface was covered with recent false membranes.

CASE 2. *Perforation of Appendix Vermiforme.—Peritonitis.—Recovery.*

James Wood, æt 35, a laboring man, was admitted to Bellevue Hospital, September 1st, 1848. At this time he was suffering from intermittent fever, contracted in the northern part of the island.

He stated that he had been in good health until May last, when, whilst at work he was suddenly seized with a sharp pain in the abdomen "as if a dirk-knife had been run into his belly." He was laid up for several weeks with what his physician, at the time, called an attack of peritonitis. Of this he was quite cured, and had no interruption of health until taken with the ague, for which he was admitted. The usual treatment, by sulphate of quinine, soon restored him to his usual healthy condition. During his convalescence he suffered once from epistaxis, (the cause of which was not satisfactorily made out,) by which his skin was blanched and considerable debility produced.

Shortly after having been cured of his fever he was again taken with peritonitis, without demonstrable cause. There was febrile excitement, pain on pressure, over the abdomen, vomiting, constipation and tympanites. These symptoms were much mitigated by treatment, when dysentery of a severe character sat in, of which he died on the 14th of October, much emaciated.

Autopsy, 18 *hours after death.* The Thorax was healthy in all its parts. The abdomen presented numerous traces of peritonitis, recent in some parts, so that the false membranes deposited could be easily torn or mashed by pressure between the fingers. One or two coils of small intestines were attached to the pubic region by cellular bands of considerable strength. The cæcum was very firmly bound down to the posterior abdominal walls by old adhesions, which were much thicker and stronger here than in any other place. The appendix vermiforme was completely covered, and hid from sight by false membranes, of old date, which had glued it, in its whole length, to the surface of the cæcum.

An attempt was made, by inflating the intestine, to find a perforation in the gut; but no air escaped. The appendix was then carefully dissected from its bed, when an ulceration, about as large as a pea, was found to exist, an inch and a quarter from its cæcal extremity, by which a communication had been established between the peritoneal cavity and that of the appendix. Between this opening and the free end of the diverticulum were two other perforations, about the size of duck-shot.

The large intestine offered marks of well characterized dysenteric ulceration. The small intestines were healthy.—*Oct.* 25, 1848.

Death from injury to the Head by a Slung-shot.

By W. H. Van Buren, M. D.

A man of forty-five years of age was arrested by a police officer, at a house in West-street, for disorderly conduct, under the supposition that he was intoxicated. He was taken to the station house, and, next morning being still stupified, it was suspected that he might be crazy. He was accordingly conveyed to the police-office, and committed by the magistrate on a charge of insanity. Within twenty-four hours, however, he died in a state of muttering delirium.

Before his death a *linear* wound of the scalp was discovered on the anterior part of the head, on the left of the median line, about one and a quarter inches in length, and surrounded by very little evidence of contusion. Beneath the wound a very decided depression was also felt in the skull.

On *Post mortem* examination an oval oblong depression, one and a-half inches in its longest diameter, was found in the os frontis, situated on the left side of the sagittal suture, and just anterior to the coronal. Both tables of the skul were depressed about three-eighths of an inch, the inner table being involved to a greater extent than the outer, and being broken into a number of irregular fragments. In the outer table there was only one slight fissure, on the margin of the depression, the edges of which were singularly smooth and sharp.

On sawing through the centre of the top of the skull, about three ounces of pus escaped. The dura mater was found detached from the bone for a considerable distance around the seat of fracture by the pus. The substance of the brain, for a limited space beneath the depression, was also very decidedly softened.

Dr. Van Buren remarked, in presenting this specimen to the Society, that he had taken some pains to procure all the authentic information within his reach with regard to this very interesting case, as it furnished an example of a somewhat novel, and very serious variety of surgical injury, which had of late been of not uncommon occurrence.

The linear character of the wound, and the clean cut edges of the fractured bone, would seem to show that the force exerted by the slung-shot was little less than that of the musket ball propelled by gunpowder. In the absence of all positive information, it was probable that at least six days had elapsed since the receipt of the injury; and from the manner in which death had occurred, there was little doubt but that the timely use of the trephine might have prolonged, or indeed saved life. The necessity of a close examination of the head previous to determining upon the existence of insanity is also apparent.—*Sept.* 27, 1848.

Case 2.—*Protrusion of Omentum after the operation of Paracentisis Abdominis.*

In the case of a female patient, twenty-four years of age, who was suffering from extensive general dropsy, the consequence of disease of the mitral valve of the heart, following Rheumatism and Albuminuria, Dr. Van Buren performed the operation of paracentesis abdominis, as a palliative measure towards the close, to relieve, if possible, the extreme dyspnœa.

The patient was also tormented by a harassing cough. The omentum became entangled in the eyes of the canula employed, so that it was necessary to lay it aside; and it was only by means of a probe thrust into the lancet wound, that the omentum was prevented from closing it like a valve, and the fluid was thus drawn off. The wound was made in the linea alba about two inches below the umbilicus. It was closed after the operation by several strips of adhesive plaster, accurately applied, over which a soft folded towel was placed as a compress, and retained by a bandage to the abdomen. The patient was temporarily relieved by the tapping, and although the cough continued severely, and her situation was very precarious, no pain was complained of in the belly, until the fifth day, when she called attention to a bloody discharge which stained the bandage. On removing it the plaster and compress were found pushed aside by a hard, dark red, fungoid mass, the size of a goose egg, which protruded through the wound of the abdomen, the edges of which were suppurating. On examination. the protruding mass was found to consist of omentum, thickened and hardened by fibrine effused in consequence of inflammation, and partially sphacelated on its surface, from the strangulation to which it was subjected.

The mass was constricted about its middle, and consisted of two portions, which had evidently been protruded at different times under the influence of the violent cough. There was no abdominal tenderness, and the protrusion seemed to cause no additional uneasiness. An emollient poultice was applied, under the impression that it would separate by the sloughing process. Death occurred, however, before the separation of the mass, and it was removed with the surrounding integuments. The omentum is seen to be firmly adherent to the peritoneum on the inner aspect of the wound. There was no peritonitis. The immediate cause of death was œdema of the lungs.

An instance was mentioned by Dr. Swett, in which, after a similar protrusion of the omentum during paracentesis, though to a much less extent, death followed from peritonitis.

Dr. Van Buren also mentioned a case in which, after using the lancet and canula in tapping, for ascites, depending upon cirrhosis of the liver, he found it necessary to apply the ligature to both ends of a small arterial branch which threw out blood freely, and *per saltum*, for some time after the water had ceased to flow. The incision was made at the same point as in the preceding case, and the vessel was probably an anastomotic connection between the epigastric arteries of either side.—*Nov.* 23, 1848.

Encephaloid disease of the Lung.

By Thomas F. Cock, M. D.

Dr. T. F. Cock reported the autopsy, and exhibited a specimen of primary cancer of the lung. The history of the case threw no light on the *Post mortem* appearances. The patient, a clergyman aged 52, died after a lingering illness. The upper two-thirds of the right lung exhibited well-marked encephaloid degeneration, appearing in the lower part of the diseased mass, not unlike tuberculous infiltration, being solid, but quite friable, while the portion near the apex broke readily into a semi-fluid dark purple mass. The left plura contained considerable serum. The liver presented several deposits of carcinoma, perfectly characteristic. No other organ contained morbid deposit, nor was there any external manifestation of cancer. In the pelvis there was considerable purulent effusion, of quite recent date.—*Nov.* 23, 1848.

Cancer of the hand—Amputation.

By W. S. Bowen, M. D.

Samuel Bradley, aet. 68, seaman, Connecticut, admitted November 17th, 1848, with an ulcer on the right hand, which embraces the whole of the dorsum from the bases of the fingers to the wrist. This commenced, as the patient states, like an ordinary wart, which, having been picked and irritated, soon became an ulcer, and has gradually proceeded to its present size and condition. The ulcer is circular in form, with a foul and excavated surface, and discharges a thin ichorous matter. The granulations are exuberant, pale and œdematous. The tissues about are infiltrated with serum, and there is considerable swelling and redness of the whole hand. He has sharp lancerating pain in it, which occurs in paroxysms. Amputation of the fore-arm was performed three or four days after admission, by Dr. Post. Everything went on well, but slowly, and early in February he was discharged, cured.

In the interval between admission, and the operation, the hand was dressed with ung. stramonii.

Dr. Bowen also exhibited portions of a python—a *Javanese Coluber*—presented by Monsieur Guiladieu, the Naturalist of the American Museum, and which died in convulsions.

The cause of death was intestinal ulceration ; the mucous membrane was perforated in several places, and the sub mucous tissues very much thickened. Ascarides swarmed over this inflamed portion, some eight or ten having their anterior extremities an inch or so buried in the wall of the intestine. The perforations were close to each other, and were of a size only sufficient to admit an ascaris. The villous coat was exceedingly hypertrophied, and contrasted strongly with the velvety smoothness of the neighboring parts.

There existed in the lungs entozoa of a different description. (Linguatula.)

There was a little surgical pathology in this snake. The heads of several of the ribs were in a state of chronic inflammation, and very much enlarged ; others were carious, with deep excavations in the corresponding surfaces of the vertebræ.

Case of Cancer of the Lung.

By B. W. M'Cready, M. D.

A woman, between fifty and sixty years of age, entered the Bellevue Hospital about three weeks ago. She was thin, and complained of debility ; her complexion had a dirty tinge, but was not straw-colored, and she was troubled with some cough. About a year previously her right breast had been amputated for cancer. Her breathing was regular and natural in point of frequency; and careful examination could detect no evidence of disease in the lungs. Her appetite was impaired, but no special trouble was detected in her digestive organs. A few days after the patient entered the Hospital her respiration became frequent, and her countenance anxious. Examination detected the presence of fluid in both pleural cavities. This rapidly augmented, and thirty-six hours after it was first observed the woman expired.

On *Post mortem examination* the lungs were found studded with cancerous tubercles, varying in size from a pea to a marble. The pleura and the pericardium both contained masses of a similar character, and cancerous matter was found too in the ovaria. The body of the phrenic nerve on the right side entered a cancerous tuber, which formed, as it were, a knot about it. On the left side the nerve, as it entered the diaphragm, seemed lost in a mass of a similar character. One of the pneumogastric nerves in its course through the thorax was likewise several times surrounded by cancerous masses. One kidney was completely absent, the supra renal capsule altered in appearance, being attached to a fatty mass, having no appearance whatever of a kidney. The other kidney was hypertrophied. The uterus was bifid, the body being completely double, while on the posterior part of the os there was a prominent tubercle, nearly dividing that aperture into two parts. Externally the abdomen had the appearance of a woman who had borne children.—*Nov.* 23, 1848.

CASE 2.—*Extensive tuberculous disease—Peritonitis—Death.*

A woman entered the Bellevue Hospital two months ago, she was feeble and emaciated, and had slight cough. She passed urine frequently, each time it being small in quantity and loaded with pus. On being questioned she stated that twelve months previously she had been attacked suddenly with pain in the hypogastrium, fever and frequent desire to pass urine. Soon afterward the urine became thick. The pain and fever gradually subsided, but the frequent call to pass urine, and the "thickness" of that fluid had remained. She insisted that she had never had any pain in the back or loins. Examination did not detect any decided evidence of the presence of tubercles in the lungs.

The patient gradually failed, symptoms of peritonitis having supervened a few days before death. On *Post mortem examination* both lungs were found to contain numerous crude tubercles, and in the upper part of one lung there was a small cavity. The peritoneum was violently inflamed, and in parts covered with softened fibrin. The pelvis of both kidneys were distended with pus, and the tubular substance partially destroyed. The right kidney was not so extensively affected, and adhering to the walls of the abscess in it, was a quantity of whitish debris, which looked like softened tubercular matter. In the course of the left ureter was an ulcerated opening, and surrounding it was an old abscess, partially emptied, containing one or two ounces of pus. It was the rupture of the walls of this abscess which had occasioned the peritonitis. In the bladder was a circular ulcer, about the size of half a pea, and near the ulcer, under the mucous membrane were several rounded white bodies, between the size of a pin's head and a pea. The whole disease was probably tubercular in its character, and if so, it exhibits another instance of the extent to which tubercular disease may proceed without causing any characteristic constitutional symptoms.—*Dec.* 11, 1848.

Case of Extravasation of Blood under the Dura Mater—Paralysis—Death.—By C. E. Isaacs, M. D.

Dr. Isaacs presented a specimen of effusion of blood, under the dura mater, taken from a patient at the Colored Home. He entered that place about seven months ago, affected with general paralysis, which was sometimes greater and sometimes less, and more on the left than on the right side. He improved a little, and occasionally walked about; then would suddenly become worse, and so on. On *Post mortem*, the only disease found, was in the brain—on the right side, underneath the dura mater, was a strong, well-organized membrane, nearly as thick as the dura mater, and smooth on its upper surface—inside of this cyst were several clots of blood, which had the appearance of having been effused at different dates, and some of which were quite recent. The under surface of the cyst was smooth, but had in places shreds of false membrane loosely adhering to it. Beneath the cyst the brain was considerably depressed by it—*the surface of the brain at this point was perfectly smooth and polished, as was also the under surface of the dura mater lying immediately over the cyst.* The blood had evidently been poured out into the cavity of the arachnoid, between the serous portion which covers the brain and that lining the under surface of the dura mater, and a cyst subsequently formed around it. It is remarkable, that the cyst should have contracted no adhesions to the surfaces of the arachnoid. The intermittence of the symptoms might, perhaps, be explained by the absorption of successive effusions.* Dr. Isaacs also exhibited a specimen of complete absence of the common iliac arteries on both sides—the abdominal aorta, divided at the usual place, giving off on each side, at the point of its *bifurcation*, the external and internal iliac arteries. In another specimen the aorta gave off on the right, the common iliac on the left; there was no common iliac, but the external and internal were given off at the point of the division of the aorta, the obturators, in the first specimen, both arose from the external iliac. In another specimen the inferior thyroid arose from the right common carotid, three fourths of an inch above the origin of the latter from the arteria innominata.—*Dec.* 11, 1848.

Case of Oclusio Vaginæ Complicating Labor.

By Prof. C. R. Gilman, M. D.

Dr. Gilman reported a case of nearly perfect occlusion of the vagina in a parturient woman. She was first seen by him, in consultation with Dr. Cooper, in labor with her second child; the waters had escaped some hours before, the pains forcing. On examination per vaginum, the head was found to occupy the pelvic cavity, but to be covered by a pretty firm dense membrane, which, starting from the anterior vaginal wall, low down, and near the meatus, passed backwards and somewhat upwards, so as to form a cul de sac, an inch or less deep, near the sarcum. This membranous covering appeared smooth, uniform, and no opening could be found in it. An opening there certainly was, as the liquor amonii had escaped, and after a careful and somewhat prolonged examination a small dimple was detected near the meatus, into this a probe was first introduced, and then a bistouri, with which the membrane was freely severed by a crucial incision. The head was now plainly felt external to the os uteri—its advance was rapid, and the delivery was completed in two hours. From inquiries subsequently made, it appeared that the first labor had been difficult and very painful, that coition had since been painful. Still impregnation had taken place. Dr. G. alluded to another case, where impregnation had taken place, and the occlusion was so nearly perfect that with aid of sight and touch he was utterly unable to find any opening to a cul de sac less than an inch deep. In that case the labor overcame the occlusion. The mal-formation was supposed to be congenital.—*Dec.* 27, 1848,

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* A similar specimen has since been shown to me by Dr. Swett, C. E. I. March 28th, 1849.

PART SECOND.

CRITICAL ANALYSIS.

Art. VII.—*On the Cryptogamous origin of Malarious and Epidemic Fevers.* By J. K. Mitchell, M. D. Professor of Practical Medicine in the Jefferson Medical College of Philadelphia. Lea & Blanchard, 1849 : 12mo. pp. 137.

This little volume will abundantly compensate for the time spent in its deliberate perusal. We fear, however, that the modern disposition of readers to look for something immediately practical and palpably admitting of direct use, will stand in the way of this ingenious and philosophical attempt to throw light upon a very difficult, but very important subject. We have never been of opinion with Professor Bartlett as to the absolute worthlessness of what are called theories, and the exclusive value of mere facts. As well exalt the mere worker in the quarry above the architect who designs the temple or the palace. Enlisting ourselves among those, who, with Bacon, give an undoubting preference to the *experimenta lucifera* over the *experimenta fructifera*, we regard the knowledge of occult causes, although in its dawning it must go through the twilight and progressive stages of hypothesis first, then theory, and only rise gradually into the broad sunshine of doctrine and principle, as among the most valuable of all acquisitions. We would gladly tempt our readers to take up this Essay ; and, for the purpose of showing them what they may find in it, we will offer them a brief analysis, or abstract of its contents.

It consists of six Lectures, read to the class of 1845–46, in the Jefferson Medical College, in which, as is well known, their distinguished author holds the Professorship of Practical Medicine. They are prefaced by an Introduction and Dedication to the Candidates for Graduation of that Session, which may be regarded as an appeal in favor of the claim of Professor Mitchell to the merit of the original proposition of the peculiar Hypothesis, or Theory which is advocated in the Lectures. This seems to be called for, by the recent publication of Cowdell's Disquisition on Pestilential Cholera, in which its phenomena, &c. are explained by reference to an extrinsic *fungous* origin. Whether or not, as is intimated, the views of Cowdell are traceable to the previous lecture room discussions of the general topic by Dr. Mitchell, which were known, talked of, and read, on both sides of the Atlantic, it is impossible to deny to the latter the title of *discoverer* of all the domain of truth here explored.

The first Lecture consists of a review and demolition of all the existing theories, or hypotheses. The source and origin of malaria, the familiar name by which we denote the cause of certain diseases, are considered at some length, and efforts are made to prove that their invasions are not essentially connected with the presence of either living or dead vegetable matter in any of its visible or palpable forms. Nor are they dependant upon, or uniformly produced by, any appreciable conditions of the atmosphere, thermometrical, barometrical, hygrometrical, or electrical; or on the presence of any cognizable emanations or gases, combinations of sulphur, or carbon, or nitrogen, or hydrogen, or phosphorus.

It must be conceded that none of these views are satisfactory; Dr. Mitchell thinks them all untenable, and proceeds to argue that "Marsh Fevers, and some of the Epidemics, must be referred to a *living organic cause*, capable of re-production by germs." These germs may be re-produced in the body; then the diseases which arise from them are contagious. If produced independently of the body, and out of it, they give rise to malarious, i. e. non-contagious diseases.

Such germs may be either of vegetable or animal nature. As they are minute beyond the reach of our senses, with all known aids, their existence and character must be a matter of inference. Dr. Mitchell objects to "the animalcular theory:" First, That it has never been shown that animalcules are poisonous in any way. Second, That it removes none of the difficulties of the subject. Third, That it is a hypothesis which examination does not strengthen or confirm; and, Fourth, That "the vegetable branch of the organic theory" is greatly more probable, and bears examination much better.

The second Lecture is rich in interesting facts. Here the author traces for us the course of observations which led him to the belief that malarious diseases, so called, owe their existence to the presence and agency of cryptogamous vegetation; the lichens, algæ and fungi, the name of the latter being chosen by him, as a convenient term to include them all. "The fungi are of all vegetable substances most highly animalized; they are distinguished for their abundance and diffusion; their poisonous properties; their season of growth; the minuteness of their spores; their love of darkness and tainted soils, and heavy atmospheres." Of all these properties he affords numerous proofs and exemplifications. "Ubiquity is one of their most peculiar properties," hence the universality of their influences. The cryptogamous sporules are minute enough to enter the vessels, and pass on freely with the circulating fluids; Fries "has seen them of the size of $\frac{1}{10,000}$th of an inch, a volume one-third of that of blood globules, and two-thirds only of that of chyle globules."

> "In examining, when mixed together, blood globules and the spori of various minute fungi, I have often seen the latter, in line along the disk of the former, when it required fourteen of them to subtend its long diameter. They were, therefore, at least ten times as small as the chyle-globules. So much for *size.* As to the selective power of the lacteals, we know that they suffer very many and various poisons to pass into the circulation; and that, in this respect they are much less particular than our fathers imagined. Besides this, we know that fungous growths, both in man and the lower animals, have been found in places to which their germs could have gained access only by the circulation, or by imbibition. There is, therefore, no good reason for doubting that the spores of fungi find their way to the channels of the circulation, as do the cells of exanthematous diseases, and the virus of syphilis."

Dr. Mitchell dwells with force upon the period of growth of the fungi, which is in autumn, just when malarious diseases are most rife.

In Lecture third he lays similar stress upon the undeniable fact that the night is the period at which the cause of these diseases is most active, and that it is in darkness that the fungi enjoy and exert their peculiar vigor. While indestructible by the heat of boiling water 212°, and by the cold of solid carbonic acid, minus 118 of Fahrenheit, the fungi are, as it were, capriciously modified in nature and movement by slight causes, among others by light, climate, moisture, &c.

He goes on from ancient and modern records to collect numerous instances, showing "the extraordinary association of fungous life with the existence and propagation of great epidemics and intense endemics." In ascribing, as he does, the milk sickness of our own country, as well as the Milzbrand of Germany to a fungous source, he encounters, as it seems to us, a gratuitous difficulty. If the fungous source of this disease were visible it would be found. Minute and careful search has been made for it, stimulated by the promise of a large reward from the legislature of Kentucky. If the minute sporules were diffused in the air they would be *inspired* by the inhabitants of the country, who are affected by small portions of the diseased flesh, milk or butter; and he has maintained that, as in the employment of anæsthetics, much smaller doses will act upon the system, taken in through this inlet. But men are only thus poisoned through the intervention of animal food. The ox kind are almost exclusively affected. Sheep we have never known to be suspected, in our visits to districts in which milk sickness exists, and have not observed any precautions taken as to mutton or kid. The hog, we believe, escapes altogether. But the first feed with their noses close to the ground, and the second seek for fungi, and, as he tells us, (p. 59,) are in South Carolina liable to be poisoned by them. Farther than this, some of the sections of country notoriously liable to milk sickness are as notoriously healthy and free from malaria; for example, the charming valley of Jocassa, in the upper corner of South Carolina, among the Alleghanies. Lastly; if the spores find in the organism of animals a nidus and increase, so as to account for the facts, what becomes of the exclusive attachment to *place*, and not to *person*, (p. 32,) which constitutes the difference between malarial and contagious affections; and why may not the same increase and multiplication and enhancement take place in man?

In the fourth Lecture we are reminded of the poisonous nature and influences of many, or most of the known fungi. The morbid effects produced by these are described, and the analogy dwelt on of these effects with the symptoms of fever, and other diseases attributed to malaria. Even the edible mushroom is accused of giving rise to fevers. Cases are related to show, too, that periodicity belongs to the toxication from fungi, in both forms of remission and intermission. The author himself was attacked by an intermittent while collecting and experimenting upon fungi, and was cured by "the usual treatment of an intermittent." Strong, but fair inferences are here suggested as are to be drawn from "the well known fact that no remedy is so valuable a corrective of the febrile and other consequences produced by fungous poisoning as the preparations of cinchona." The fungous gangrene of the apple and the potato is shown to be a vegetable contagion by the experimentum crucis of inoculation. "Hassall caused decay at will in sound fruit by inoculating it with the spawn of fungi from rotten specimens. The mere bruising would not cause decay unless fungi or their spores were present." "Scherer found in a body dead of metroperitonitis, organisms resembling minute algæ in the abdominal cavity." Some cutaneous diseases, and certain morbid affections of the mucous surfaces, too, are shown to be connected with the presence of peculiar minute vegetable organisms. Muscardine is described as "a contagious disease of vegetable origin," attacking the silkworm. All this seems inconsistent with the distinction so strongly drawn, in his first lecture, between malarious and contagious diseases, when he affirms that "one is the product of person, the other of place." (p. 32.) We are so well pleased with his ingenious view of the vegetable origin of diseases, that we are ready to imagine some of the contagious affections to resemble very much the muscardine in character. Cholera, for example, may have been, primarily, the result of fungous poisons, from the cryptogamous vegetation of Bengal; but the sporules of the particular fungus reproduce themselves in many or some of the subjects, and thus are conveyed in the sick body, or if escaping from it in any way, upon some of the clothes, as in the fungous leprosy spreading upon the walls, &c. which Dr. Mitchell has referred to, as known three thousand years ago. He gives the most satisfactory account of the agency of fomites that we have seen anywhere, when he shows that the disease of the animal organism may attack vegetables, and diffuse itself by actual increase and multiplication upon "garments and the walls of houses." He thinks that animalculæ would "scarcely be found thus transferable;" but we believe the Acarus Psoræ will long retain its vitality, if it does not increase and multiply, in woollen clothes, gloves, &c. The subject demands close and continued investigation.

In the 5th Lecture, the explanatory nature of the "fungus theory" is somewhat exultingly set forth, and the facility which it affords for surmounting the difficulties which have puzzled the advocates of all the contrasted hypothesis. The *latency* of marsh-fever is a curious phenomenon. In our own country patients are seldom attacked immediately upon exposure; a period of from seven to twenty-one days elapsing on the average. The extremes are remarkable. Lind tells us of boats' crews being seized within a few hours, while some of the sufferers from the Walcheren expedition did not fall sick for four, five, or six months after their return to England from the Low Countries. Dr. M. thinks the peculiarities of the fungous poisons account best for these irregularities; but he gives no instances of the postponement of their efficient action beyond thirty hours. This difficulty then remains. The "fungus theory," like every other, leaves the facts unexplained. Next, he considers the strange limitation of the febrile cause, whatever it may be; and maintains that in the connection with place so tenaciously preserved by fungi, we have the rationale of all this class of phenomena. But if the spores of the poisonous fungi remain attached to the soil, how do they enter the lungs of the sufferers? If they enter the lung diffused in the air, how can they escape being carried abroad by "the wind from the marsh." They are indefinitely minute and light; they act in small quantity, and are diffused in great abundance: why do they stop on one side of a low wall, a screen of trees, or a common road, "as it is alleged that marsh miasma does? Here the animalcular theory, advocated by Dr. Nott, of Mobile, seems to us to have the advantage. These little creatures, as even Dr. M. admits, p. 93, "are always capable of choice," and "scarcely so transferable as fungi." With powers of resistance to currents of air, they may prefer one spot obstinately, to another; but this we cannot say of vegetable exhalations, whether organic or inorganic. We think Dr. M. lays too much stress on the anti-malarious virtues of the plough. The Indians of the Oregon say that fevers were unknown among them until the white man broke up the soil; and the clean cotton fields of South Carolina, Georgia, Alabama, and Mississippi, are as fruitful of fever now, after half a century of culture, as they were when first turned up. Nay, the type has become more fatal than formerly, and congestive attacks are as rife there as in the everglades of Florida.

Dr. M. lays too great stress upon the inoffensiveness of the fungi when dried, as a *peculiar* quality. We believe it may be predicated of all poisons whatever—corpora non agunt, nisi soluta. Gaseous bodies are an apparent exception, but they may be said chemically to be dissolved in heat and air, as others are in heat and water. Nor would we venture to trust ourselves in damp sheets through a night's sleep, even if not mouldy. We would prefer, we confess, to run the risk of mouldy sheets that were dry. We should regard the danger from the latter as "very slight."

The contagiousness of yellow fever has been long a questio vexata. Whether contagious or not, the disease shows an unwillingness to extend itself in certain circumstances which we think the animacular theory explains best. "Contingent contagionists" are driven by this unwillingness "into all kinds of devices, to defend," says Dr. M. "their untenable position." But we do not feel ourselves relieved, even if we regard the materies morbi as a fungus. The facts are still puzzling. Yellow fever is indigenous; it is importable; it is portable. If it is a fungus, portable in a trunk, why cannot you carry it into the country around New-York or Charleston? The late experience at the Staten Island quarantine, and much more of the like character, shows that the materies morbi may be wafted from diseased ships to the neighboring shore. The famous case of the Eclair seems to prove that a fever may originate as malarial and become propagable by transportation, and even by personal intercourse. The mass of the profession appear disposed to regard the history of this last disease as conclusive of the contagiousness of yellow fever, but we presume Dr. M. remains unconvinced. He considers it to be "portable and yet not contagious." Why then is it portable in a ship or a trunk from Vera Cruz to Charleston, aud yet not portable from Charleston to a rice-field?—a favorite nidus too for malarial fungi.

The "fungus theory" is undoubtedly well adapted to explain the tenacity of the attachment of certain diseases to certain ships. Dr. M. mentions yellow fever; he might have added erysipelas, upon good authority. But if the fungous spores resist the cold of solidized carbonic acid, p. 57, we do not see how they can be at all affected by the mild winters of Charleston, Savannah and New Orleans, as alleged at p. 106.

The capricious spread of cholera presents acknowledged difficulties, which attend alike all speculations as to its origin and propogation. We cannot wonder that some contagionists allow the insufficiency of contagion to account for all the facts. We cannot wonder that Monjon and Holland should revert, for this purpose, to what Dr. M. rather unfairly calls "the exploded doctrine of Kircher and Linnæus," the animalcular theory of disease. This doctrine is still maintained by many writers—Neale and Henle, and we may add Velpeau, in Europe; and recently Nott, in our own country. We hold the name of Holland in such respect as a medical philosopher, that we could not regard any doctrine as "exploded" while favored by him alone—"himself a host." We do not see "the absurdity of supposing that animalculæ could exist and procreate in a Russian winter" any more than fungi. Ehrenburg found several species of animalculæ "come to life constantly" after having been frozen; and Agassiz discovered the Philodina Rosea among the red snow of the Alps. Cold represses, doubtless, but does not extinguish cholera anywhere; and in the domestic atmosphere heated by Russian stoves, and in the comfortable nidus of Russian furs, both fungi and animalculæ may readily increase and multiply. But stoves dry the air, and all moisture out of doors is frozen in a winter in Moscow, and thus we think the difficulties in the way of the fungi are, to say the least, as great as any which beset the path and the existence of the supposed animalculæ. We ourselves are contagionists; but whether the contagious materies morbi is an organized cell or a microscopic parasite, animalcular or fungous, we think is not settled. One of the three we believe it is. That is, we agree with Dr. M. and Cowdell, and Monjon, and Holland, that the cause of Cholera is organic and living, and capable of rapid reproduction. We farther believe, that, whatever other habitat it may affect, whatever other nidus it may procreate in, whether a marshy soil or a snow bank, whether a foul ship or a trunk of damp clothing, the bank of a navigable river, or the path of a caravan through the sandy desert, it certainly does find a favorite place of multiplication and propagation in the body of a cholera patient, and the collection of many such bodies in a cholera hospital. We would gladly assume for cholera "a fungous origin," if we thought with Dr. M. that with this assumption "all difficulties vanish." We really do not see that the semina morbi, if vegetable spores, are more liable than animal germs to the usual accidents by which "seeds are conveyed, or lost, or favored, or repressed." We were rather prepared by what we had previously learned of their extremely tenacious vitality, of their almost omnipresent ubiquity, and of their immense reproductiveness, to think them very little liable to such accidents, and to apprehend that diseases depending on a cause or causes possessed of these qualities, should know no limit either to their duration or progress. With regard "to the exemption of Brazil, New-Holland, and the Polynesian Islands, from malarious diseases," *if they be* thus exempt, we think the problem still remains to be solved. It will not be difficult to ascertain whether or no cryptogamous vegetation exists there, or whether in peculiarly limited degree, or in forms differing from those found elsewhere. Such a discovery, when made, will strengthen exceedingly, if not absolutely establish the "fungus theory."

We are disposed to enter a serious protest against the inference which Professor M. has drawn from his own views, that "the detention at quarantine, even of the sick, is for yellow fever and cholera unnecessary." Why is it, even admitting the truth of the "fungus theory" to be completely proved, why is it that the body of the sick man, his hair, the inequalities of the surface of his trunk and limbs may not harbor the invisible spores—why not the clothing in which he must be wrapped when about to be removed? Why, we ask, may not all these, setting aside the question of contagion, convey the semina morbi, as well as "the cargoes and soiled baggage" which, we are told, must be "detained imperatively." And how can you hope to purify the latter, when "neither a heat of 212°, nor a cold of — 118°, will destroy the vitality of the fungous germ? What remains but to destroy ship, cargo and baggage together?

The Lecture closes with some truly scientific and philosophical considerations upon the "principles which seem to govern the movements of diseases now generally "acknowledged to proceed from germs." Whether the germs are of animal or vegetable nature they appear to be subject to the same laws of suspended activity, and an energy revived or renewed at distant and undefined intervals.

In our present ignorance of these laws, the movements of small-pox and scarlatina seem to be as capricious as those of yellow fever or cholera. "At all temperatures, in every variety of humidity, beneath every variety of skyey influence," such diseases explode into an epidemic prevalence, and then retire for longer and shorter periods. "It is in vain to hope," says Dr. Mitchell, "that any one of the ancient forms of pestilence has been entirely eradicated, or any germ totally lost." This is, indeed, a gloomy view of things, yet we fear, but too well founded. The whole of this Lecture, upon which we have ventured to comment with entire freedom, is full of interest and instruction, and will repay a careful and repeated perusal.

In the last, the sixth of the series, we are presented with some additional facts of high value, and a recapitulation of the whole argument is given in conclusion. One cannot but be struck with the force of the inferences drawn by Dr. Mitchell from the fungiferous nature of the volcanic tufa, the basis of the soil of the Maremma in Italy, and its perfect fitness to explain the insalubrity of that most sickly region. Perhaps the principal strength of the doctrine may be said to be shown here. But as we proceed, we meet with certain difficulties which seem to us almost insurmountable. We will state them fairly, and in the words of the author. (p. 124.) "The cryptogami have, in a high degree, the curious power of destroying their own reproductive powers, or of poisoning, against themselves, the soil in which they grow. The lapis fungifer, or volcanic tufa, if actively employed, loses in about three or four years its power of production, which is only reacquired by a repose of several seasons." Why, then, is the Campagna always malarious, without any known interval, always deadly?

Again, (p. 126,) "a curious exemplification of the poisoning of the soil against their own growth is afforded by the fungi which have so lately preyed on the potato crop." "In Ireland the potatoes grow much better in the subsequent year, when the diseased potatoes have been *left to rot* in the soil, than when they are carefully removed." But one would think their remaining there would surely poison the soil more than their removal.

Dr. Mitchell next devotes a few paragraphs to the obscure question why certain diseases destroy the liability to their own recurrence. We think that it was Daubeny who maintained that the roots of all plants gave out exhalations and excretions, as man does by his vital actions, poisonous to themselves. Liebig and others regard them as rather exhausting the materials of supply from which their peculiar juices are drawn. How far these analogies help us in this dark department of pathology, we will not pretend to say. If the exuviæ of fungi are thus protective against themselves in the animal body, so are the exuviæ of contagious cells, on the similar supposition of their existence and death. But why should not both be eliminated, or if not eliminated, why are they not detected in the blood!

Finally, let us again offer our acknowledgments to Dr. Mitchell for his interesting little volume. If we have found it less explanatory than its author believes it to be, it has the very high value of being exceedingly suggestive. In a truly philosophical spirit of scientific inquiry, it discusses boldly questions that we are desirous to see answered. For our own parts, we regard the hypothesis, or theory, which it maintains, to be as plausible, nay, as probable, as any other. We are predisposed to favor it somewhat, because we think it will prove, when established, entirely consistent with all known facts, and with opinions already received by us as to malaria and contagion, which Dr. Mitchell looks upon it as destined to substitute and overthrow. For example, if the fungi act not when living, but in death, by their decay and decomposition, and the contrary has not been proved, the present notions of malaria will receive strong support. The advocates of the gaseous nature of malaria, those, especially, who maintain its close relations with carbon as a basis, will reflect complacently upon the fact that the fungi, unlike all other vegetation, are always engaged in the production and elimination of carbonic acid gas. For our own part, we think it very likely that many of the semina of contagious diseases, *though not all*, will be found to be of vegetable or fungous character. Some we regard as most probably animalcular. Some may be inorganic or chemical.

We see no contradiction or incongruity in these views. Nay, by their blending, as in nature, we think the difficulties of pathology already much lessened, and likely to diminish steadily with every step in the advancing knowledge of what may be called the Natural History of Diseases, to which these lectures are an instructive and ingenious contribution.

D.

Art. VIII.—*Obstetrics: The Science and the Art.* By Chales D Meigs, M. D. Professor of Midwifery and the Diseases of Women and Children, in the Jefferson Medical College of Philadelphia; one of the Phisicians of the Lying-in Department of the Pennsylvania Hospital, Vice-President of the Philadelphia College of Physicians, &c. &c. With one hundred and twenty-one Illustrations [Philadelphia, Lea & Blanchard, 1849. 8vo. pp. 671.

Among the peculiarities of the Medical Literature of this our day, one of the most striking is the increase in the number, and the improvement in the charater of the text books on obstetric medicine. Ten years ago, the student familiar only with the English language, was restricted to the works of Denman, Burns, Dewees, Velpeau, (translated by Dr. Meigs,) and that very clever but most objectionable book, the London Practice. A few smaller works might indeed be named, and among the best of them the Philadelphia Practice of Midwifery, by the author, whose larger and much better work is now before us. Nor were the French much better supplied; they had, to be sure, Baudeloque and Capuron, as old and accredited standards, which, with Velpeau, and Mad Boivin made up their stock. Within the past ten years we have had published text-books of different degrees and kinds of merit by Blundell, Lee, Ramsbotham, Rigby, Churchill, besides the translations of Moreau and Chailly. In France there has been a like multiplication of obstetric text-books, Duges, Chailly, Moreau, Cazeau and Jacquimier, all within eight years. To this goodly supply Professor Meigs has made an addition, of the value of which we will now proceed to give our readers the means of forming an opinion. First, as to externals, the work is large, and in trade-sale phrase, "*well got up;*" an octavo of nearly 700 pages, type and paper excellent, the wood cuts, (of which there are one hundred and twenty-one,) respectable, some of them perhaps deserving a more liberal phrase of compliment. A glance at the volume shows that its goodly outside is not its only merit; it is comprehensive, and for the most part full. Few subjects that fall naturally under the somewhat fantastical title Dr. Meigs has chosen, fail of a share of his notice.

Another feature of the present publication which it is agreeable to notice, is its comparative freedom from those quaintnesses of expression which, though no doubt perfectly natural to Dr. Meigs, have the appearance of being most exquisite affectations, and as such detracted very much from the popularity of the work on Females. Natural or artificial, this book is comparatively free from them, and we greatly rejoice thereat. Miss Helen Blanque, e. g. does not here figure, through fifteen or twenty pages of what the profane would call twaddle. When we say that this book is comparatively free from the fantasticalities which deform the work on females, we would by no means lead our readers to suppose that it is written, as any other human being than Professor Meigs would write, or, that it is written in any known language, or made up of a combination of the words of any number of languages.—Neither of these is true. The purist who thinks that English books should be written in English, will doubtless quarrel with such phrases as "the diseases of the neonatus," "cellular tela," while those who have a polyglot taste, and care not how many languages are used, provided the words do belong to some known or imaginable language, will perhaps, revolt at "alible material," "despart the labium," "the dislocated position of the fundus," we are wrong—manifestly wrong, as to this last phrase, it does belong to a well known language, which, we suppose, Professor Meigs would call the Hibernicotauric—"dislocated position" is clearly Hibernicotauric.

But enough of such matters—let us look at the substance of the book; it begins of course with an account of the pelvis; when speaking of the sacral holes, Dr. Meigs gives four cases, where extreme agony arose from pressure of the child's head on the sacral nerves. So great was the suffering in one patient, that he considered her in imminent danger of death from excess of pain. She was relieved by the application of the forceps. Professor M. believes that, but for such aid, she would have died in half an hour. In the other cases the forceps were applied. Forceps' operation rendered necessary to relieve cramp, are as Professor Meigs says, new. How perfectly would those cases have been relieved by Chloroform or Ether; but that is a subject to which we shall arrive in due time. On page 31 it is stated that bony anchylosis of the coccyx takes place when women begin to grow old—this, though a common, is we think an erroneous opinion—bony anchylosis is rare, and only found in very old people. We have been much struck by the description of the planes of the pelvis, illustrated as it is by some capital outline figures from Wigand—this part of the book will repay a careful study.

Chapter 2d, on the mechanism of labor, so far as it depends on the relations of the pelvis and fœtal head, seems to us out of place, preceding, as it does, the chapter (3d) on the fœtal head—the matter, however, is excellent. Chapter 4th describes the genitals (Genitalia Meigs?) and chapter 5th the ovaries. In the latter is given a sketch of the discovery of the ovarian ovule, in the mammal—all these anatomical details are enlivened by constant reference to practical points. We should be glad to know the authority in actual observation, for the statement on page 105, that in some pregnant women "the corpus luteum is either very small or not readily discernable." We have never seen or heard of a case where the corpus luteum was not readily discernable—the woman being pregnant.

On page 106, et seq. Dr. Meigs details, with great complacency, his discovery of the vitellary nature of the corpus luteum; and gives a long catalogue of the writers who have described the corpus luteum, and who say nothing of its vitellary nature. We apprehend that none of the German anatomists are likely to contest the discovery. The discovery published in the American Philosophical Transactions *is interesting*—though for a very different reason from that which the discoverer and the society imagine. We pass over chapter 6th, on menstruation; and chapter 7th, on amenorrhœa: the latter shows good sense, to which the strange phraseology of the author does great injustice—yet here we find some speculations on sanguification, of which we will only say, that they are singularly out of place. The chapter on pregnancy is copious, but sadly deficient in arrangement and method. We are surprised to find Professor Meigs detailing a case where pregnancy was supposed, on grounds that seem to us utterly futile, to have been protracted to four hundred and twenty days, nearly fourteen months. A case is given from Asdrubali, where an Italian lady was confined just thirteen months after the death of her husband. It cannot but be that the minds of students and young practitioners will be unsettled when they find any importance attached to such mere fables.

The remarks on abortion are, like all of Dr. Meigs' practical writings, excellent, especially those upon the tampon, a means of arresting hemorrhage, too often neglected: and when used, too often applied negligently and unskilfully.

The subject of prolapsus is too summarily dismissed, while that of retroversion is expanded over fifteen or twenty pages, yet is there nothing new, or at all peculiar.

Chapter 9th, on labor, has a most characteristic introduction, in which the Commander of the Faithful, the Caliph

Al-Mamun, his medical favourite, John Ocularius, and his histographer, Abul-Pharajïus, all figure respectively. Then we come upon some plain common sense and excellent practical precepts, which after Abul-Pharajïus, are quite refreshing; take as a specimen the following remarks on rheumatism of the uterus:—

I have met with several instances of rheumatic gravid womb, where the woman was tormented with false pains for many days previous to the real attack of labor. In one delicate female, pregnant with her first child, there was daily pain in the womb for a month before the child was born; and these pains had so far the external characteristics of labor, that the most experienced practitioner might be deceived by them, until he should clear up the diagnosis by the Touch. The Touch alone could convince him, that the os uteri was not in the least concerned in the matter; the tubule or cylinder of the vaginal cervix remaining as completely undeveloped as in the most perfect repose of the gestation. In all such instances the globe of the womb is sore to the touch, and only the slight occasional condensations that occur in all wombs towards the close of pregnancy could be looked to as the sources of the patient's distress. It may well be conceived that a rheumatic uterus could not but be painful whenever its parts should be disturbed by the normal contractions of its muscular tissue.

In certain examples of rheumatism of the uterus, I have found the patient with a sore belly, often finding herself in apparent labor, and as often disappointed; yet disclosing to the Touch a partially dilated os uteri for many days, yea, even for a whole month, before the veritable attack of labor came on.

Let the Student remember that when he shall be hereafter summoned again and again, to a *false alarm*, as it is called, for the same patient, he will probably have to treat a rheumatismus uteri.

Let him bleed such patient; let him keep her in bed, covered rather too warmly than not enough so with bed-clothes; let him give her some doses of Dover's powder, or anodyne enemata, at night; let her abdomen be bathed two or three times a day with equal parts of warm oil and laudanum; and let him see to it, that she entertain a soluble state of the bowels by means of gentle aperients, of which a pure precipitated sulphur, with calcined magnesia, is the most to be desired.

Case.—I advise the Student early to come to the resolution of being cautious in giving his diagnosis and prognosis of these doubtful cases of labor. I know that there belongs to professional men a disposition to *pronounce* at once. This, perhaps, arises from a false pride, which prompts them to seem to know all things at a glance, or by mere intuition. If the young beginner, being called to a supposed case of labor, should witness a very regular recurrence of pains in the belly, and should also place his hand on the abdomen of the woman during one of those pains, he might find it very hard, and be led to *pronounce,* "Yes, it is her labor." Let him never pronounce, let him never give an *opinion* until he knows upon what it is founded. For example, I was called in the month of July, 1841, to a lady having very regular pains, which she said were like those she had experienced in her two former labors. During one of these I held my hand on the abdomen, which became hard, and evidently so because the womb was contracting strongly. "How far are you advanced, madam, in your pregnancy?" "Seven months and one week, sir!" "In that case I ought, before making any prescription, to learn absolutely whether the womb is opening or not; for if it be opening, then your labor is begun, and must proceed; if not, then you ought to have some remedy to prevent it from beginning, lest your child should be born prematurely, and thereby lost, from its non-viability." Effectively, I found the os uteri open so much that I could introduce two fingers, and touch the chorion, which was tense. The cervix yet retained a quarter of an inch of its tubular form. I said, "You are in premature labor; but, as there is not the least degree of vascular excitement, and no pain except this that you complain of, I shall give orders to send you a potion of laudanum, in hopes of arresting the case here." She went out to her full time, up to which date I was repeatedly called to give assistance in her supposed attacks of labor. But, when the labor came on in earnest, the relaxation of the cervix was already so great that she delivered herself in a very few minutes. I am surprised, when I reflect upon it, that the retentive power of the cervix and os uteri should have enabled her so long to keep the ovum within the womb. This was doubtless a specimen of disordered innervation of the womb, arising from a rheumatic principle acting on the mass of that organ. She had just come ashore from an East India ship, from Madras.

Such cases as the above occur repeatedly in course of a considerable practice. I have seen a patient with the os uteri as large as a dollar, and with strong pains, cease to suffer, sit up, walk about, and even go out for days in succession before the labor was resumed and terminated.

The next chapter on the conduct of labor is good, though to some things in it we strongly object—the directions on page 287 to draw down the vertex, by getting a good purchase on the ledge, formed by the parietal bones, over riding will, if they have any influence, be sure to lead to meddlesome midwifery. We more strongly object to the following.

But where the posterior fontanel is found quite up towards the side of the pelvis, and the anterior fontanel is at the same time within reach of the finger, we may feel assured that the dip has not taken place; and the retardation of the labor may safely be attributed to that cause. Could we, under such circumstances, get the vertex down, or more towards the centre of the pelvis, the pains would be more successful. Now, as the edges of the parietal bones over-ride the edge of the occipital bone, they form a ledge, which gives a good purchase for two fingers, which, when applied upon that ledge, are generally enabled to draw the vertex downwards to the required position. * * * * * *

In all the cases where the rotation fails for want of the requisite dip, or approach of the chin to the breast, let that want be supplied by pulling down the vertex as directed. It must be admitted that such gentle measures will not succeed always; but we have, then, the powerful resource of the whole hand, which may be introduced into the vagina, and sometimes within the cervix; and which, taking the head in its palm and fingers, can place the vertex wherever it may be desirable to fix it. It should be remembered, however, that a vectis is, very rarely, but yet imperatively demanded for the management of such a case.

We cannot believe that Dr. Meigs really means what the words he uses mean—"introduce the hand into the vagina," "into the cervix," "take the head in the palm and fingers, and place the vertex wherever it is desirable to fix it;" this is surely dangerous teaching. The chapter closes with the subject of anesthesia, to which, as our readers know, Dr. Meigs is opposed: but of this we spoke fully in our review of Channing in the last number of this Journal, and, therefore will not now dwell on it. Indeed we must bring this notice, already extended beyond what we had anticipated, to a close. There are many other points to which we would gladly refer, but must not. In parting with Dr. M. we say that his work is a valuable and, will be, a useful addition to obstetric literature. If we have commented rather freely upon what we cannot but regard as great blemishes, we fully appreciate, the wisdom, the learning, and the eminently good moral tone of his work—we trust that this will not be his last appearance as an author.

C. R. G.

BIBLIOGRAPHICAL NOTICES.

ART. IX.—*The Transactions of the American Medical Association, Instituted* 1847. Vol. I. Published by the Association, Philadelphia; 1848, 8vo. pp. 408, (continued from page 246.)

Having presented the readers of the Journal, in the last two numbers, Analyses of the Reports on Surgery, (including Anæsthetic Agents,) Practical Medicine, and Medical Literature; we now proceed to notice, according to promise, the remaining portion of the volume.

A.

Report of the Committee on Medical Science.

The nature of this report, consisting as it does of a synopsis of the progress of Medical Science for the year during the service of the committee, precludes the necessity of our entering into detail, in noticing it. This circumstance, together with the fact, that most of its contents have already been before our readers in the American and Foreign Retrospect of the Journal, renders it only necessary for us to express our opinion of the merits of the performance.

In the selection of the material composing this report, Dr. Wragg has evinced a good discriminative judgment. A thorough acquaintance with the different branches of medical science, and an untiring and commendable zeal, in condensing and arranging all the different and diversified facts which were scattered, broad-cast, over the wide domain of American and Foreign medical literature. For ourselves, we can easily see that in way of the preparation of this report there must have been formidable, and we doubt not, serious difficulties continually presenting themselves. Such must needs be the case where many and different minds are conversant with the same set of facts: it then becomes a matter of the greatest difficulty to point out the exact part each observer has played in the improvements or discoveries developed. These remarks may be said to apply alike to nations as well as individuals.

In this report are embraced the improvements in anatomy and physiology, hygiene, general pathology and therapeutics, and medical jurisprudence.

B.

Report of the Committee on Practical Medicine. (Vide this Journal, pages 70–237.)

C.

Report of the Committee on Surgery. (Vide page 65.)

D.

Report of the Committee on Obstetrics.

This report was drawn up by Professor Lindsly, of Washington; and is principally occupied with the consideration of the use and value of Anæsthetic agents in midwifery. The following corollaries, relating to their beneficial use, are contained in it.

1st. That the pain attendant upon parturition, which is frequently so agonizing to the delicate organization of woman, and occasionally even fatal from its severity, may be partially or wholly relieved.

2d. That even in very small quantities, they benumb the acuteness of sensibility, and thus allay that feeling of fear and apprehension, which is often so distressing and injurious to the parturient female.

3d. That this tranquillizing impression may be kept up for hours with entire safety, and will be found of the greatest benefit in those tedious and harassing labors, where the condition of the parts is such as to admit of no other active interference; and our patients may thus be enabled to pass successfully the trying ordeal, when without this relief they would succumb under their long continued suffering.

4th. That relaxation of the soft parts and of the os tincæ, and increased secretion of mucous follow their use; and that these circumstances are in themselves of much importance in advancing the labor.

5th. It is the opinion of many accoucheurs, and of some of the committee, that they increase the expulsion of the placenta, thus manifesting the qualities of the ergot, in addition to their other peculiar properties. Should farther experience demonstrate the truth of this proposition, it will be a matter of considerable moment, as these remedies, particularly chloroform, can be administered much more readily than ergot; and will produce their effects much more speedily.

For the directions given by the committee in regard to their administration, we refer our readers to the American Retrospect of this number.

Following this report is a short supplement, containing the opinions of several distinguished practitioners, relating to the relative value of ether and chloroform, founded upon what appears to us a very limited number of observations. This supplement also contains the opinion of Dr. Louis Mackall, of Maryland, relating to the beneficial use of ice taken internally, to promote uterine contraction in cases of suspended labor. Dr. M. states, that for ten or twelve years past he has been in the habit of employing pounded ice in cases of suspended labor. That, when this has been swallowed freely, the pains have immediately returned, the uterus has contracted and the labor has been speedily completed. He farther states that in cases where labor pains have been suspended for twelve or twenty-four hours, by these means they have been renewed promptly and efficiently. And that in cases of inevitable abortion, where the uterine contractions are feeble and inefficient; and where hemorrhage is inconsiderable, he regards it as invaluable. It closes by a statement that Dr. Blackburn, of Barnesville, has used a strong decoction of the roots of the cotton plant, in two cases of labor, with successful issue, to promote uterine contractions where ergot had failed.

E.

Report of the Committee on Medical Education.

This report opens with an allusion to the favorable auspices under which the American Medical Association commences its career of high promise, and with the statement that, "looking to a future, more or less distant, for the attainment of all the objects to be desired in the matter of medical education, the committee have deemed it right and expedient to exercise great reserve and caution in the recommendation of measures for the sanction of this body." They state that they are not prepared, neither did they deem it necessary for them to give a detailed exposition of the state of medical education in foreign countries. They reiterate the oft-repeated charge "that in all the most enlightened nations of Europe the standard of qualifications essential to the attainment of the doctorate of medicine, is far higher than it is in the United States." They allude to the inherent differences in the governments, institutions, and genius of the two countries; and state how far the foreign schools may, with propriety, be adopted as models in this country. In that portion of their organization which leads to a thorough practical acquaintance with the different branches of medical science, "they may," says the report, "with propriety, be adopted as models in this country, but, farther than this, it is questionable whether we could imitate them in their general details."

In the matter of the extension of the term of lectures, &c. the report states that "the courses of instruction, the requirements for graduation, and the mode of examination of candidates in our medical schools, generally remain in the same condition as at the time of the last meeting of the association." They note, however, some four or five exceptions to the statement. In relation to "the reputed number of pupils and graduates at the medical institutions of the country during the past year," the committee state that in the twenty-five schools heard from, the total number of students were four thousand one hundred and ninety-two, and the number of graduates at the twenty-four schools heard from was eleven hundred and eighty-eight.

The requirements of the United States Army and Navy Boards of Medical Examiners remain the same as reported last year. This report closes with a series of resolutions which were adopted by the association, and which may be found in Vol. 1st, New Series of this Journal, page 123.

F.

Report of the Committee on Medical Literature. (Vide p. 246.)

G.

Report of the Committee on Publication.

This Report contains a statement of the cost of printing the Proceedings of the Convention of 1847, the Treasurer's Report, and a list of the names of those who have paid the assessment of the year 1847.

H.

Code of Ethics adopted by the Philadelphia College of Pharmacy. (Vide vol. 1, New Series, p. 392.)

I.

A Statement in relation to the United States Naval Medical Corps.

This statement, submitted by Drs. Wood and Pinkney, consists of an enumeration of qualifications requisite for the candidate to secure admittance into that body. It eschews the impression that has gone forth, that "the aid of influential friends is necessary to secure even a permission to appear before the Board." They state that "for admission into the naval service, a fair preliminary education, and a knowledge of the branches strictly professional, are the nominal requirements; but from the amount of competition, higher attainments are necessary to ensure success. Professional acquirements being equal, those persons would be selected who possess in addition a knowledge of collateral sciences and languages; relative position, a matter of importance being decided according to the amount of professional and general information of the successful candidates."

J.

Communication on Hygiene, from the Medical Department of the National Institute.

This communication, submitted by Drs. Wynne and Thomas, announces the circumstances which gave rise to the appointment, in 1845, of a Special Committee by the National Institute, whose duty it should be "to inquire into the Sanitory condition of the United States." It states some of the causes which have tended to obstruct the progress of the committee in carrying out their instructions, and closes by recommending to the American Medical Association:

First, The establishment of a permanent committee on hygiene.

Second, A recommendation to the various State Legislatures to establish, throughout the Union, uniform systems for the registration of births, deaths and marriages.

K.

Statement relative to the extent to which Drugs are falsified, particularly with a view to their sale in the United States.

For the substance of this statement, together with that of the two divisions following it, the reader is referred to vol. 1st, New Series of this journal, pp. 115–382–385.

L.

Statement of the Progress made by the Standing Committee on Registration of Births, Marriages and Deaths.

From this statement we learn that no definite action has as yet been taken by the legislatures of the several states in regard to the address on this subject, which was ordered to be sent out by the association last year. We are pleased to learn that "the agitation of the subject by the Association has undoubtedly been the means of awakening attention to the value of a general registration in many places," and that the committee "have strong reason to believe that the time is not far distant when a majority of the states will perceive how great an interest attaches to it." We sincerely hope that the subject will soon receive the attention it deserves.

M.

Report of the Committee on Indigenous Medical Botany.

The general tenor of this report is good, and had the individual members of the committee been as industrious as the chairman, a very full and valuable report would, we doubt not, have been the result, as it is, a very satisfactory account of four valuable plants is given.

N.

Report on the number of Practitioners of Medicine in the States of Virginia, Delaware and Massachusetts.

These reports, with the exception of that of the State of Delaware, are very incomplete.

O.

A new feature in the Anatomical Structure of the Genito-Urinary Organs not hitherto described.

For a synopsis of this interesting paper the reader is referred to vol. 7th, p. 364, of this Journal.

P.

"*Ophthalmitis Postfrebrilis:*" *A severe form of Inflammation of the Eye, following Typhus Fever, as it appeared in New-York in* 1847–48. (Vide vol. 1, New Series, p. 260.)

Q.

Catalogue of the Officers and Permanent Members of the American Medical Association.

This division, followed by the index, closes the volume. A volume alike creditable to the Association and American Medical literature.

ART. X.—INTRODUCTORY LECTURES.

1. *Introductory Lecture to the Course of Materia Medica and Pharmacy, in the University of Pennsylvania.* By GEORGE B. WOOD, M. D. Professor of Materia Medica and Pharmacy, Philadelphia, 1848. 8vo. pp. 23.

2. *An Introductory Lecture to the Medical Class of the University of Louisville.* By LUNSFORD P. YANDELL, M. D. Professor of Chemistry and Pharmacy. Louisville, 1848. 8vo. pp. 28.

3. *A Discourse on the Influence of Disease on the Intellectual and Moral Powers. Delivered as an Introductory Lecture at the College of Physician and Surgeons, in the city of New-York.* By JOSEPH MATHER SMITH, M. D. Professor of the Theory and Practice of Physic, and Clinical Medicine. New-York, 8vo. pp. 35.

4. *New-York University Medical Department. Hygiene: An Introductory Lecture.* By SAMUEL HENRY DICKSON, M. D. Professor of the Theory and Practice of Medicine. New-York, 1848. 8vo. pp. 24.

5. *New-York University. Medical Department. Lecture on Obstetrics, and the Diseases of Women and Children.* By GUNNING S. BEDFORD, M. D. Professor of Obstetrics and the Diseases of Women and Children. New-York, 1848. 8vo. pp. 25.

6. *Introductory Lecture delivered before the Class of the Medical Department of the Saint Louis University Session of* 1848. By JAMES BLAKE, M. D. Professor of Special, General and Surgical Anatomy, St. Louis, 1848, 8vo. pp. 18.

The introductory of Professor Wood, opens by a statement that his present position is such as to require of him a deviation from the ordinary rule governing the delivery of introductory lectures, and which rule he has generally observed.

His theme is the state of the Medical Profession in the British Islands; the material for the illustration of which is drawn from his late personal observations in England. It starts with the proposition that "the present organization of the Medical Profession in Great Britain, like her political constitution and common law, has been the gradual growth of her wants and necessities, without any preconcerted or consistent plan."

Such being the case, it is at the present time "universally acknowledged in England, that the organization of medicine in that country is defective; and that, with a vast amount of individual learning, skill and devotedness, the general economy of the profession is not upon the same elevated level as the other great national interest."

In speaking of the divisions of the Medical and Pharmaceutical Professions in England, he states, that it embraces four bodies of practitioners, more or less distinct;—the Physicians, the Surgeons, the Apothecaries or general Practitioners, and the Chemists and Druggists.

Of these, the Physicians practise medicine either exclusively, or in connexion with obstetrics; the Surgeons, strictly so called, are confined to operations, and the treatment of affections generally denominated surgical; the Apothecaries combine the occupations of the pharmaceutist, the physician, the obstetrician, and often of the surgeon, under the name of General Practitioners; and the Chemists and Druggists are restricted to pharmacy; in other words, are identical with the apothecaries of this country.

Of the four divisions, the physicians hold the highest rank, the title of which implies that they are graduates of a British or Foreign University, or have become licentiates of the Royal College of Physicians of London. The legal privilege of practicing is confined within narrow bounds. Thus by the Charter of the College of Physicians, that body has the power of preventing any one from practicing as a Physician in London, or within seven miles of that city, who has not submitted to its examinations, and who has not received its license. These privileges may be enforced by fine, and imprisonment of those who reject its authority. In relation to England and Wales, beyond the limits just mentioned, Dr. Wood states, that the only *legal physicians* are the licentiates and extra-licentiates of the College of Physicians, and the licentiates of the Universities of Oxford, and Cambridge, to whom he presumes should be added the graduates of the London University: extra-licentiates are permitted to practice only beyond the bounds of London and its vicinity. They undergo a different and less strict examination, and are required to pay less than one-half the diploma fees demanded of the licentiate, which last are not less than three hundred dollars. Although the legal power, or privilege to practice, is thus limited, custom has established the principle, that the the fact of graduation in a Scotch or Foreign University is a sufficient authority to practice. Dr. Wood cites, in illustration of this fact, that one of the graduates of the University of Pennsylvania, an Englishman by birth, is now practicing acçeptably in one of the noblest cities of England, with no other authority than his American diploma.

The following description of the professional habits of an English Physician, contrasted with those of our own country, possesses so much interest, that we copy it entire:—

> Many of you, I dare say, fancy him to be a man out early and at home late; riding from house to house on horseback, or in his one-horse vehicle; at the beck and call of any one who may wish to see him, whether by day or by night; carrying his medicines along with him; turning his hand to every thing that may offer; at one time using the lancet, at another dressing a wound or an ulcer; now perhaps extracting a tooth, and then superintending a labor; and, at the end of the day's work, noting the results in his account-book, and congratulating himself that, at the expiration of the year, he may, by sending out his bills, gather in enough to feed, clothe, and warm his family. A London, or even provincial physician in England would smile at this notion of his day's work. The fact is that he rarely touches a medicine, eschews all surgical offices as beneath the dignity of his position, would probably as soon think of performing the part of an executioner as that of a bleeder or tooth-drawer, and yields up obstetrics with the greatest possible good will to the general practitioner, or to the few who make it a special duty. His business is purely to give advice, and to prescribe. The metropolitan physician seldom leaves home before 12 or 1 o'clock, and then drives out with his chariot and pair; and a fine equipage is almost as necessary an appendage as a hat or a coat. Much of his most profitable business is at his own house, where he receives calls and gives advice after his breakfast hour; the patients being admitted into a reception-room, and one by one entering the sanctum in their turn. Very many of his visits are in consultation with the general practitioner, who is usually called upon at the commencement of the disease, and in mild cases, and asks the aid of the physician when the symptoms become grave or obstinate. Not unfrequently he makes but one visit, waiting to be again summoned by the attending practitioner, before repeating it. The wealthy only can afford the luxury of continued and regular attendance from the physician. In this country, the nearest approach to the ordinary practice of the English physician is that of a medical man of established reputation in one of our larger towns, who, wishing to limit his business, confines himself as much as possible to the giving of advice at home, and a consultation business abroad. But here the analogy ceases. The mode of compensation

differs entirely. With us, each piece of service is noted in the day-book, and a bill rendered for the whole at stated periods. In England the service is paid for when received. We charge one or two dollars a visit, they expect a guinea or about five dollars. We have a legal claim for our fee, and often lose it. They have no legal claim for theirs, and are sure to get it. A physician in this country may, if fully occupied, in the most favorable situations, make eight or ten thousand dollars a year; a London physician, of high repute, not unfrequently receives five thousand pounds, equivalent to nearly twenty-five thousand dollars, and sometimes doubles that income. It is remarkable how our sensibilities accommodate themselves to the peculiar circumstances of our position. The physician in England thinks that to send in a bill for attendance would level him with the mechanic, and looks with something like contempt on the practice. I confess that to hold out my hand for money at each visit would be repugnant to my sense of delicacy. I should feel as if I were reducing an honorary to a mercenary service. It seems to me that the practitioner, under such circumstances, though he may not absolutely repeat the servile formula—*remember the physician,* must have the words in his heart.

The number of Physicians compared with that of the other classes of practitioners is small. They are generally highly educated, possessing a high tone of morals, and a polished exterior, all of which characterise the gentleman. Though inferior in rank to the highest aristocracy, they often associate on equal terms with the best society.

The Surgeons proper, are those who profess to deal only with surgical affections, with the addition in some instances, perhaps of obstetrics. They do not seek a diploma in medicine, and have no special designation to distinguish them fromother members of the community. To them the title of "Doctor" is offensive. Their credentials are generally obtained from the Royal College of Surgeons of London, whose diploma of membership, given after a specified course of instruction, and a sufficient examination by the college, is every where received as sufficient authority to practice, and is sought for by most of them who have respect for themselves, or seek the respect of the community. "A Fellow" of the College implies a more ample, literary, as well as professional attainment; and the title is conferred after a satisfactory examination, upon candidates who can bring the requisite certificates of previous preparation; such, that they are twenty-five years of age, have a competent knowledge of the Greek, Latin, and French languages; and have been engaged for six years in the acquisition of professional knowledge, in recognized hospitals and schools of medicine, either in the British Islands or abroad.

Dr. Wood says that he found a distinction made in England, in conversation between the surgeons and consulting surgeons. The latter appear to be those who aim at, or have obtained the highest position among their fellows, who leave to others the humble offices of the profession, and confine themselves to the giving of advice at their houses, to the performance of operations, and to consultations. They are men of the highest attainments, respect and influence in the communities in which they move; and, like many of the more successful physicians, have been honored by knighthood or a baronetcy—the highest title which has ever yet been conferred on any member of any branch of the medical profession in Great Britain. Dr. Wood could not discover that any marked distinction in social standing existed between the physician and consulting surgeon, both being generally deemed much superior, on the average, to the lower grade of surgeons, and to the general practitioner.

The class of General Practitioners is by far the most numerous, and, Dr. Wood believes, is destined to play an important part in the future medical history of the country. It had its starting point in the once humble and despised apothecary; and growing gradually upon the wants of the community, has at last obtained an overshadowing magnitude, which, though its individual branchlet may be of but little significance, will, says Dr. Wood, probably, in time, by its very mass, shut out the sunshine of public patronage from the hitherto more elevated classes, and cause them to finally wither in its shade. In England, the apothecary, though he continues to prepare and sell drugs, has superadded the practice of the different branches of the medical profession to the pharmaceutical, which has thus become secondary in his own estimation, and that of the public. Without becoming a good medical practitioner, he has ceased to be a good pharmaceutist; and the name of apothecary has come at length to signify, says Dr. Wood, a mongrel compound of doctor, man-midwife, surgeon, and drug-vender; a true jack of all trades, and master of none, willing to play second part to the regular physician, and, though used by the public, yet looked on by them with a sort of good-natured contempt. According to Dr. Wood, the education demanded of the apothecary before he can obtain permission to practice, is of a character quite equal to the requisitions of our own schools. Independently of five years' apprenticeship, which is considered requisite for his due pharmaceutical accomplishment, he must be twenty-one years old, have attended three courses of winter, and two of summer lectures in some recognized school, and at least a year in some recognized hospital, containing one hundred beds. Of the different branches of medicine, surgery alone is omitted from the schedule of studies. Dr. Wood states that they enjoy the advantage, if it can be considered one, of having a legal claim for compensation for their services; and, as with us, they render their bills at stated periods, instead of receiving their fee in hand, which last is five shillings, instead of a guinea for each visit. As before stated, Dr. Wood believes that this class of practitioners are destined to play an important part in the future history of the medical profession in England. "It is easy to foresee that, with increasing competence, and a still more enlarged instruction, they must raise themselves in time to be the almost exclusive medical practitioners of the land; for low prices, with equal qualifications, will, in the long run, invariably carry the day."

At the present time, it is universally acknowledged that the organization of the medical profession in England is exceedingly complex; and so much so is it the case, that Dr. Wood found that, even there, all the entangled relations of the different sections of practitioners were not by any means universally understood. What else could we expect, when we remember that "connected with the Royal College of Physicians are two, if not three classes of practitioners; with the Royal College of Surgeons, two; with the Society of Apothecaries, a third; while, in the instance of new regulations in any of the institutions, there is necessarily one class of those in existence before their adoption, and another of those who enter the profession afterwards;" add to all this, also, the fact that the degree of different institutions is of different weight or value, and the complex nature of the organization of the medical profession in England can be easily seen and appreciated in all its bearings. The dissatisfied, and restlessness state of the whole profession which at present exists, clearly indicates the necessity of reform; but all attempts made to effect it, have as yet failed, on account of the interposition of conflicting interests. Dr. Wood believes, however, that, ere long, the sagacity and judgment so characteristic of the English, will be brought to bear on this confused subject, and that measures will be devised calculated to bring about harmony, if not perfect unity in the profession; so that the struggle as to what peculiar interest shall be best promoted or defended, will give way to an emulous rivalry in furthering the general good.

Whilst treating of the subject of medical education, and the qualifications demanded of the candidate for the medical diploma, Dr. Wood remarks that his class will, no doubt, be surprised to learn that none of the proper medical schools in England, and none of the literary institutions with which they are directly connected, have the power either of conferring degrees, or of giving a license.

The only graduating bodies are the Universities of Oxford, Cambridge, and London. The two former grant medical honors to those exclusively who have completed a course of academic study under their own supervision, unless, perhaps, the graduates of the Dublin University may constitute an exception; the latter extends them to all who can present the requisite credentials, and undergo the requisite examinations; no matter in what school or schools their medical education may have been conducted, provided only that the school be one recognized by the University, and of the four years of scholastic attendance required, one year at least shall have been in connection with one or more of the schools of the United Kingdom. Attached to the Universities of Oxford and Cambridge there are professorships in the medical sciences, and, in the latter, courses of instruction are given; but in neither is there a complete school. The University of London has not even the shadow of a school attached to it; for the University College of London, whose medical class is, I believe, the largest in England, has no more connection with the University of London, notwithstanding the similarity of name, than any of the other respectable schools upon the island. The University is merely an examining and degree-conferring body, established by government so as to enable dissenters to obtain academic and medical honors; the graduates of Oxford and Cambridge being required, I believe, to profess adhesion to the national church.

The schools are generally established in association with hospitals; the prescribing physicians and surgeons of these institutions uniting to get up courses of instruction in the different branches of medicine and surgery; and so necessary is the hospital connection deemed, that, when independent schools are instituted, they endeavor to set on foot an infirmary, to be under the charge of the teachers, as in the cases of the King's College, and the University College in London.

That this plan of forming schools subsidary to the hospitals can never be permanently and greatly successful Dr. Wood believes certain. The great objection to it is the fact that the officers are appointed not in reference to their qualifications as teachers, but for the practical charge of the infirmary.

In regard to the number of schools, they are numerous both in London and the provinces. According to Dr. Wood there are in the former thirteen, and in the latter sixteen, recognized by the London University. Most of them "are slenderly attended; many having classes of considerably less than fifty pupils, while the most flourishing seldom exceed two hundred and fifty," as the whole number of students is small, so also that of the candidates for the degrees of the Universities is incomparably less. Dr. Wood says that he was astonished to learn "that the University of London does not graduate more than ten or eleven annually, and that in all London there are probably at no time more than from eight hundred to a thousand students of medicine." One fact (says Dr. Wood) is here certainly worthy of notice, that, while London, the metropolis of the world, with two millions of inhabitants, has little more than eight hundred medical pupils, Philadelphia, with only one-sixth of the population, counts her thousand or twelve hundred every winter.

In regard to the qualification deemed essential for admission into the different classes of practitioners respectively, they are much greater in the higher classes than with us, while those of the lower are about the same.

Thus, four years of study are demanded by the University of London as preliminary to the degree of Bachelor, six years to that of Doctor of Medicine; the Royal College of Physicians, and that of Surgeons, require, the former five, and the latter four years; and the Apothecaries' Society exacts of every candidate for their license, which constitutes the only legal authority of the general practitioner, besides an apprenticeship of five years with an apothecary, an attendance upon not less than three winter and two summer sessions of lectures.

Notwithstanding all this, Dr. Wood says that were he called upon for an opinion as to the relative qualifications of the medical men in England, and the United States, he should say, from what he has observed, that if the higher grades of English physicians are superior in education to ours, the case is reversed in relation to the great mass of practitioners. The main cause of this superiority on our part is probably that the American physician reads much more after the nominal completion of his studies than the English, "of which one of the strongest proofs is the comparatively small editions of medical books sold in England. Their own best works are more read in the United States than at home."

From a hasty sketch which is given of the organization of the profession in other parts of the United Kingdom, it appears that it is much the same as in England. "In Ireland it is almost an exact copy of that existing in England." In Scotland, if any deviation exists, it will be found in a tendency at least to simulate that of our own.

This exceedingly interesting lecture of Professor Wood closes with an allusion to the social character and standing of the medical profession in the British Islands, a portion of which we quote :

> Upon the whole, I presume, their relative social standing is equal or superior to that of the profession in any other country in Europe, though inferior to that which is enjoyed in the United States, where, I am proud to say, the medical men as a body maintain a position with the highest, whether we take, as a measure of elevation, extent of attainment, sentiments of honor and of humanity, cultivation of manner, or the respect of the community.

The Introductory of Professor Yandell is principally occupied by a consideration of some of the principles involved in the question of Medical Reform. It opens by a brief allusion to the varied and different circumstances under which the members of his class appear before him, after which he enters into a consideration of some of the causes which gave rise to the National Medical Association, and the results which will be likely to flow from the deliberations of that body. "Already," he says, "an impulse has been imparted by these meetings to the profession, which will be felt in the most sequestered corners of the country, and will rouse physicians to greater activity, and to habits of study; a new life has been infused into the body, and will be felt by all the members. The influence, though the time is so short, has already been everywhere felt and acknowledged."

He then alludes to the present imperfect system of general education, and cites, in confirmation of his views, the opinions and declarations of Milton and Locke. He refers the student, as an example for emulation, to the character of John Hunter, after which (with the same intention in view) follows a short account of the life and talents of his friend, the late William Martin. For ourselves, we cannot agree with Professor Yandell in his (implied) declaration that the principles developed in the life and character of such men are generally adaptable, as models, for emulation, by the mass of young men.

In speaking of medicine as a progressive science, he alludes to the great improvements which, within the last few years have been developed in Organic Chemistry, Pathology, Physical Diagnosis, &c. &c.; after which follows a brief history of the rise and progress of Anæsthetics; and the address closes with a statement of the successive truths which the science of modern Geology has brought to light. This is an interesting lecture.

Professor Smith prefaces the subject of his discourse by stating that the "opening of the present, or forty-second session of this college, forms a new epoch in its history. A new feature is to be imparted to its character, by extending the courses of instruction, and adding to the Faculty a Professor of Physiology and Pathology." In entering upon the consideration of the influence of disease upon the intellectual and moral powers, he avoids the question of Phrenology, and considers the mental faculties under the forms recognized by the generality of writers on psychological science. He proceeds to define the intellectual and moral powers—passes in review their properties or divisions—the relations of each to the other, and then cites several illustrations of the curative influence of hope and imagination upon the body in disease. He states that the peculiar disposition of the mind upon which these depend is not confined to the low and illiterate, but is met with even in these times, in the higher and cultivated classes of society. And although he is "prone to ridicule and condemn the use of means which have no direct physiological action on the body," yet he believes "it is a question of interest, no less than of curious inquiry, whether the active remedies, appropriately and skilfully applied, do not in many cases exert their curative powers as forcibly through the medium of the mind, as they do immediately on the corporeal frame." He believes it as reasonable to suppose that such is the case, as to admit that a remedy of no power can effect a cure by faith, through the influence of the imagination ; for (says he) there is obviously nothing in the *modus operandi* of an efficient medicinal agent, which can interfere with the remedial action of the mind." After thus considering some of the mental phenomena observable in diseases, he proceeds at once to descant upon the main subject, viz. "some of the more common intellectual and moral phenomena, which have their origin in, and which in some degree aid in distinguishing diseases." This portion of the discourse is fully, ably, and carefully dwelt upon ; and we only regret that our limited space on the present occasion will not admit of an analysis of it. It is here that the subject of the particular mental phenomena manifested in many of the diseases of the head, chest and abdomen, as well as those of the essential fevers, are clearly and forcibly stated.

That a knowledge of all the facts and bearings of this subject is not generally possessed by the great mass of physicians is certain. That a full and careful recognition of them would add much to their success as practitioners, is equally so ; and from these admissions it follows that "in acquiring a knowledge of the physical signs, anatomical characters and treatment of diseases," the student ought not to neglect even in ordinary cases "the concomitant mental phenomena."

The fourth Lecture, in the order we have enumerated them, is Professor Dickson, on Hygiene. It is a practical, philosophic, and (if we may be allowed to add) eloquent discourse. The Philosophy of Hygiene is here treated under three heads, viz. First, The physical education of the young. Second, Personal Hygiene—the cause of life of the individual. Third, Public, or Municipal Hygiene. On each of these divisions, after a few short preliminary observations, Professor Dickson briefly but forcibly touches. While considering the first, viz. the physical education of the young, he passes in review all those causes which, growing out of the present condition of society, have, and still continue to conduce to the actual physical imbecility of the rising generation. He here portrays, clearly and truly to nature, the combined influences which poverty, in all its phases, unwholesome air, bad diet, sufficient physical exercise, and excessive mental requirements, exert in developing disease, decay and death, during the periods of infancy and youth. Sad, indeed, are the reflections to which the picture gives rise; mingled with them, however, are redeeming considerations—which, followed out in all their bearings, work out the proper and effectual remedy, found entirely in the dictates of nature and reason.

Second, Personal Hygiene, the course of life of the individual. In this division of his lecture Professor Dickson discusses points which by many are considered as among the most weighty which involve man's present fallen condition. He believes that the view which is advocated so warmly by many, viz. "that disease is unfailing evidence of wrong doing," "is not a correct sentiment in any point of view." Following this, is a concise and logical exposê of the principal considerations involved in this so-called vexed question. The natural law of hygiene growing out of the constitution of man's nature is here fully developed. A consideration of some of the principles involved in certain modes of living is entered upon, after which the subject of rest, as necessary to man's physical well-being, is taken up; and with a philanthropic eye and heart he deduces from man's physical organization and nature the necessity of a day for rest and repose, and the beneficent design of the Creator in the institution of the Sabbath. In speaking of this day he says:

> Blessed, indeed, and holy is the Sabbath of rest; and well does it befit the physician, from whom is almost entirely withheld the kindly and restorative influence of this septenary renovation, and who strongly appreciates its value by its loss, well does it befit him to inculcate on others its inestimable privileges, and contend for its universal observation. But for the wisely ordained restraint of the Sabbath, the unrestrained spirit of mammon, I doubt not, would rule with despotic sway; and the lust of gain, glowing with the fervor of a perpetually accelerated excitement, would soon reduce to dust and ashes all that is bright and gentle in the fair fabric of our modern civilization.

Municipal, or Public Hygiene, though generally most neglected, is said to be "the most truly important of all the departments of political economy." In the examination of this topic, Dr. Dickson strikes at the very foundation of some of the principles involved in criminal law. On these points we will quote his own words:

> Men have devoted time enough ineffectually in continuous efforts to *relieve* suffering and *punish* crime. I do not deny that these are proper objects of attention; but surely if we can by any method *prevent* crime and suffering, this should be our paramount purpose; and I fully believe that the physical destitution of the poor is the chief cause of intemperance, vice and disease among them. I fully believe that if one half the amount expended in hospitals and almshouses, prisons and penitentiaries, were appropriated with judgment to the care of the physical well-being of the wretched class with which these institutions are filled, the remaining moiety would be far more than sufficient for the necessities that now, with the most unsatisfactory results, consume the whole. Extreme poverty, one of the saddest and bitterest of curses inflicted by an angry Heaven—extreme poverty, the double cause and consequence of disease, is the most prolific parent of crime. Of this the inquiring moralist may be satisfied by copious testimony. Governments, then, can exercise no function of more profound responsibility than that which looks to the hygienic condition of the community. In the great plagues of Florence and of London, nay, in the modern Cholera, the multitudes grew reckless, violent; robbery and murder stalked fiercely through the desolate streets. "Let us eat and drink, for to-morrow we die," became the maxim as well with the refined sensualist of the Decamerone, as with the grim ruffians of St. Giles and the Parisian fauxbourgs. Such demoralization follows always upon the heels of pestilence and famine.

Following this, the question of quarantine receives a concise, yet careful consideration. The medical police of ships, and the late congressional act relating to emigrants, &c. is not passed by. The following suggestions pertaining to the sanatory regulations of cities close this exceedingly interesting lecture—a lecture in which the philanthropic mind will find abundant hints for reflection.

> Let the density of population of every ward in every city be regulated by law, allowing the maximum consistent with life and health. Let all arrangement of houses, so as to form confined courts, or alleys, or lanes, be prohibited, and no one permitted to be so built as to prevent in any other a free outlet of air in one direction at least; let *all domiciliation in cellars be absolutely forbidden;* these caves are unfit for the residence even of domestic animals, and fatal to man. Let a general supervision of domestic architecture be exercised, so as to insure, in every house, ventilation and admission of light; let places of shelter—night-houses—be erected at the public cost, where lodging, under the supervision of the police, may be had by the homeless, both at a minimum rate of payment, and for pauper vagrants without such demand, where temporary seclusion at least, and comparative cleanliness and comfort, shall be placed within the reach of every miserable son and daughter and victim of civilization. If it be objected that these measures are difficult and involve expense, I reply that nothing ought to be regarded as difficult every thing should be possible and promptly done, no expense should be spared that may avail to save us from the abyss of vice and wretchedness, on the profound depths of which the researches of our English brethren have thrown such appalling light.

In the introductory of Professor Bedford, a bold, and if we may be allowed to judge, successful attempt is made, to impress the minds of his class with the great importance of a careful attention to the general principles, and details, of the particular branch of medicine which it is his province to teach. After a few preliminary observations he proceeds to announce the general divisions of his subject, following which is a forcible enunciation of the evidences of design, which is furnished to the philosophic mind, in the adaptation of all the circumstances of the parturient state to the most minute fulfilment of nature's ends.

The necessity of a thorough knowledge of the *science* of Obstetrics is in this lecture carefully, clearly, and forcibly illustrated by cases, the simple relation of which, speak volumes to the anxious student in search after knowledge. In reading this lecture we have been forcibly struck with the happy vein of moral feeling which pervades it. Certainly the indulgence of such a train of feeling cannot but lend additional charms to the noble science of healing, and produce impressions upon the minds of its youthful devotees lasting and beneficial to its interests.

Professor Blake has chosen for his theme a subject of the greatest importance. In this introductory he has presented, in a clear and impressive manner, the method which the medical student should follow in the pursuit of his studies. He holds up, in all its beauties and value, the Baconian philosophy for their adoption and guide. He points out what he considers to be the legitimate field for observation. After which he lays before them the sources of error which are apt to influence them in observing correctly. Altogether, this introductory may be looked upon as possessing considerable value to the student, and also as reflecting much credit upon its author.

Art. XI.—*Transactions of the New-York State Medical Society.* Part 3, vol. 7. Albany. 1849. 8vo. pp. 76.

The Plea of Humanity in behalf of Medical Education. The Annual Address delivered before the New-York State Medical Society, and the Members of the Legislature at the Capitol, February 6th, 1849. By Alexander H. Stevens, M. D. President of the Society, etc. etc.

If we except the earliest periods in the history of our national or state existence, there never was a time when so much apathy was manifested, and so little was done by the state to foster medical education; and when the importance to the public weal of a body of learned and skilful physicians was so little appreciated as at the present time. If we look about us for the causes of this apathy and indifference, we are, at first almost at loss to find them out. A careful search will, however, lead us to the conclusion that a portion of them, at least, may be found, in the fact that the public, as well as our law-givers, have settled down into the opinion that the high and noble calling, aims and ends of the physician are subject in all respects to the same rules and principles as govern commercial relations in general. Upon this principle they have foundered all their acts. The state has withdrawn her fostering hand, and the public filled to overflowing with the doctrines of democracy, have almost ceased to think of the god-like calling of healing in any other light than that of a mercenary pursuit.

Dr. Stevens, in this masterly address, presents in a clear, forcible and philosophic manner, the plea which humanity offers to the world in behalf of medical education. He passes in review the first acts of our state fathers, and the policy which governed them in their councils. He alludes to the interest which each felt in the movements which resulted in the formation of the State Society in 1806. In speaking of the vocation of the physician, he says:

> The vocation of the physician is the spirit of true Christianity in action. It consists not alone in healing the sick, in soothing the afflicted, and recalling the wandering intellect, but also in cherishing a love of peace and moderation amongst all men, and in promoting moral and intellectual improvement. The practice of the healing art is an occupation intrinsically dignified. It cannot be divested of this quality by the humble condition of the practitioner, nor by the repulsive nature of many of his remedies; still less by the lowly condition of his patient. The true physician recognizes in the most abject human being a fellow man; in the most exalted nothing more. The offspring of the highest and the lowest, in the first moments of their existence, come under his care, alike naked and helpless. The screen which in after life conceals many of their weaknesses and some of their virtues, ever open more or less to the medical observer, is for him removed by sickness and by misfortune. Before the man of healing the trappings of greatness are laid aside and the cloak of deformity is dropped; beauty puts off her ornaments, and without a blush modesty raises her veil. And when at last, man is about to take his plunge into the abyss of eternity, he strips off all disguise and stands revealed in his primative nakedness and helplessness. Surely they who hold such relations to society should be learned, discreet and wise; trained by liberal studies and by illustrious examples, to be ever true to the cause of humanity; elevated by education (as by education alone they can be elevated) to rise above all that is sensual and sordid.

In treating of the prevailing public opinions in regard to our profession, and especially of that which relates to it as a "money-making profession." "We claim (says he) to constitute, or represent a liberal profession; and the very idea or essence of a liberal profession, as distinguished from a trade, is that the acquisition of money is not its primary object." Again:

> Medicine a money making profession! Why one-third or more of the whole practice of medical men in the city of New-York is done without remuneration. The hospitals, the alms houses, the dispensaries, the medical and surgical cliniques, the eye infirmary, the orphan and lying-in asylums, the colored home, the institutions for the blind; in fine, all institutions of a charitable kind, so far as I know, are attended gratuitously; and many of them by some of the oldest and most eminent medical men. Nor are the out-door poor neglected. When they appeal to physicians, not for advice only, but even for services which keep us from our beds, they rarely ask in vain.
>
> I have witnessed examples of self-denial, of steady holding fast on integrity, by scores of medical men; who, amid the pinchings of poverty, have refused to embark in schemes which would have given them wealth, had they chosen to seek it in the walks of quackery.

To the oft-repeated question, "Why are so many ready to enter the medical profession, if this be true?" he replies, that the *study* of it is delightful, and the rewards higher than money can bestow. "Who that feels that life is saved or prolonged by his skill, does not receive a reward? Who that has felt the warm tear of gratitude for rescuing from death a husband, a wife or child, would wish to be other than a physician?" After this he proceeds to set forth the claims which the profession has—for all the devotion and self-sacrifice which it continually bestows upon the public. He contrasts in a striking manner the relative acts of the *physician* and the *empiric*, and deduces from these the high and lofty claims of the former. The value of science to the well-being of society is not passed by, and from this, as well as from the legitimate objects of medicine, the restoration to, and the preservation of health, he deduces the claims, and presents the plea of humanity in behalf of medical education. On this latter subject he claims that "throughout the civilized world the duration of human life has increased, and is steadily increasing with the advancement and diffusion of medical science and medical art."

> In the city of Geneva, in the 16th century, 1 individual in 25 died annually. For the 18th century, 1 in 34; at the present time, 1 in 46. With us the mortality is greater. I estimate it at 1 in 40, the proportion of childhood being larger, and childhood being the period of the greatest mortality. In the British navy, among adults, none of whom are very aged, the mortality is only about 1 in 100. Seventy years ago the mortality in the British navy was 1 in every 10. In 1808, 1 in 30; 1836, 13 8-10, among one thousand—a diminution to less than a seventh of the rate in 1770. In the American army, with a corps of medical officers, not excelled by that of any other country, the mortality is little over 1 in 300 per annum. In London the mortality in the middle of the last century was 1 in 32. In the year 1838, the mortality was 1 in 36. I quote from the annual report of the Register General. Within the last twenty years the mortality of Russia has been 1 in 27.—Prussia, 1 in 36; France, 1 in 39.07; Holland, 1 in 39; Belgium, 1 in 43.01; England, 1 in 53.07; Sicily, 1 in 32; Greece, 1 in 30; Philadelphia, 1 in 42.03; Boston, 1 in 45; New-York, 1 in 37.83; the immigrants have made our mortality greater than that of our sister cities; in other respects it has diminished with the advance of medical science. These statistical statements might be multiplied at great length; but enough have been given to show conclusively the prodigious extent to which human life has been lengthened with the advance and diffusion of medical science beyond its duration in formar periods and beyond its present duration in the less enlightened countries of Europe.

While treating of the subject of Hygiene, he cites the importance and value of health to the state; and asks the question, "to what extent might the mortality of this state be diminished?" This, to the philanthropist, is an important question, and the answer given is truly astonishing—fifteen hundred unnecessary deaths in the state of New-York in one year!

But there is another view of the subject which Dr. Stevens takes, the results of which are of no less moment. To the voice of humanity a deaf ear may be turned, but to this "the golden bough" every consideration yields. To the statesman he asks:

> How much are the bones, sinews and muscles of a hired laborer worth to you, who look after the finances of the state? how much does his toil add yearly to the treasury or canal fund? A common laborer is worth $120 a year and his subsistance. Allow for his clothing and luxuries $40, the balance goes to enrich the state.—His employer pays him the $120 and boards him; but the dollars only change hands, and the value of his labor is equivolent both to his wages and to his subsistence, whatever that may be. Suppose it to be $80, this he consumes and it is lost to the state; but on the

other hand his labor has enriched the state to the full amount of wages and subsistence. He has converted a marsh or a woodland into a meadow or arable field; or he has assisted in building a house; or in raising corn, or wheat, or cattle; your tax-collector notes in his book the increase of arable land, or the new house; and your canal-collector forgets not to take the toll on his produce on its way to market.

But all are not farm laborers and the labor of women and children is not so profitable as that of men. On the other hand a farmer working with his heart, his head, and his hands on his own soil, does the work of two common laborers. A mechanic or an artisan often does still more; even to the extent of five fold as much as a common laborer. Engineers, and many professional men, and judges, render to the state services worth 30, 40, 50 per cent more than laborers. A low estimate of the average annual value of every person in the state is $50. Let us look at the subject in another point of view.

The Hon. Horace Mann, of Massachusetts, (whose authority needs no confirmation from anything I can say,) estimates the cost of every child before he attains mature age, at $500. An adult should be worth more than the cost of rearing a child; for otherwise the rearing of children would impoverish the state; which evidently is not the fact. Certainly not in this country, where, as we think, human life is worth more than in any other, and where it behooves the state to look to the preservation of it, with proportionate care. At the south a collection of slaves is worth $400 per head.

I estimate the value of every individual in the state at $750, the loss of 1500 individuals therefore would be $1,125,000. A diminution of the mortality to the extent of two per cent would add to the average life of every individual of this state 9 months and 22 days; of only one per cent 4 month and 26 days. This saving could be accomplished by an annual expenditure of 2½ cents assessed on every individual. If every laborer or inhabitant enrich the state $50 a year, or $1 per week, then 9 months and 22 days are worth $33 37½, while they would cost 2½ cents.

It is not the medical profession, Dr. Stevens correctly observes, that is chiefly interested in asking the state to provide the necessary way and means for a thorough medical education. The public, says he, must always employ medical men:

> And it rests with the legislature to decide upon the degree of knowledge and skill which they think it right to give to men entrusted with the care of the health and lives of the people. In supporting your common schools, it is not the teachers for whom you legislate; and in supporting medical schools, it is not the medical professors, and still less the medical profession, on whom your bounty is bestowed.

That the present state of medical science demands a remedy for its evils all must admit. Dr. Stevens believes that it will be found in the adoption of the following measures. He says:

> The remedy I would propose for the evils I have been depicting, have for their object to bring a good medical education within the reach of a larger number of students: to open the doors of our medical schools without charge to all that have received the necessary preliminary education, to insist upon a longer period of study, and to make the examinations more strict. I would have a distinct professor of agriculture attached to each medical school. The professors should be paid by salaries, leaving it to your wisdom to take any additional means best calculated to foster that great interest.

We heartily commend this address to the candid and careful perusal of the legislator and philanthropist. Meantime, resting assured that its influence will be felt for a long time to come in furthering the interest of medical science in general, as well as that of medical education.

Following this address, is a very short but valuable communication on the diseases of Onondaga county, by D. T. Jones, M. D. Our American Retrospect of this number contains extracts from this paper, to which we refer the reader.

In the appendix to the transactions is contained an abstract of the proceedings of the society at its late session. From it we perceive that a goodly number of members were present—that the meeting was opened by an inaugural address from the president, A. H. Stevens, M. D. after which the usual routine of business was entered upon, discussions on several interesting subjects and diseases arose, portions of which may be found in the American Retrospect of this number.

The following is a list of the officers for the ensuing year:

ALEXANDER H. STEVENS, M. D. *President.*
ALEXANDER THOMPSON, M. D. *Vice-President.*
PETER VAN BUREN, M. D. *Secretary.*
PETER VAN OLINDA, M. D. *Treasurer.*

CENSORS.

Southern District.	*Eastern District.*
Dr. James R. Manley.	Dr. Joel A. Wing.
" John Cheeseman.	" Thomas W. Blatchford.
" Charles S. J. Goodrich.	" T. R. Beck.

Middle District.	*Western District.*
Dr. Augustus Willard.	Dr. Bryant Burwell.
" Jenks S. Sprague.	" William Dayton.
" John McCall.	" John Coates.

COMMITTEE OF CORRESPONDENTS.

First District,	Dr.	Alonzo Clark.
Second "	"	Thos. W. Blatchford.
Third "	"	Jno. H. Wheeler.
Fourth "	"	Hiram Corliss.
Fifth "	"	Helon F. Noyes.
Sixth "	"	Augustus Willard.
Seventh "	"	Phineas H. Burdick.
Eighth "	"	Bryant Burwell.

COMMITTEE OF PUBLICATION.

Dr. T. R. Beck.
Dr. James McNaughton.
Dr. Joel A. Wing.

COMMITTEE ON PRIZE QUESTIONS AND DISSERTATIONS.

Dr. James McNaughton.
" Alden March.
" Joel A. Wing.
Dr. T. R. Beck.
" Peter Wendell.
" Thos. W. Blatchford.

Art. XII.—*The British Record of Obstetric Medicine, Surgery, and Diseases of Women and Children*, &c. &c.—To which is added, a Library of Obstetric Medical and Surgical rare Monographs, &c. Edited by Charles Clay, M. D. Manchester. Licentiate of the Royal College of Physicians, London; Member of the Royal College of Surgeons, &c. Author of Peritoneal Section of Diseased Ovaria, &c. &c. With the assistance of many eminent Medical Men, British and Foreign. Illustrated with Wood Cuts and Engravings. Manchester, William Irwin. 1848. 8vo. pp. 408.

Encyclopædia Obstetrica: or, a Theoretical, Practical, Historical, Biographical and Critical Dictionary of Obstetrics, including the Diseases of Women and Children. Illustrated with numerous Wood Engravings. By Charles Clay, M. D. &c. &c. London; H. Renshaw. Manchester; William Irwin. 1848. 8vo pp. 32 pp. 32. Parts 1st and 2d.

It affords us no small degree of pleasure to be able, on the present occasion, to notice the British Record. This Journal, possessing many novel features, was started nearly a year and a half since by Charles Clay, M. D. of Manchester; a gentleman who has, for a long series of years, devoted especial attention to Obstetric Medicine and Surgery; and who has, as might have been expected, elicited a good degree of professional interest and support in his somewhat novel undertaking. An undertaking which, as it respects *Quackery*, and *Anonymous Reviewing*, is entirely new in British Literature.

"The Record is so arranged as to convey to practical men, whose time is extensively occupied with the duties of a laborious profession, all that is valuable in British and Foreign, as well as Ancient and Modern Obstetric Medicine and Surgery. By means of the Journal they will immediately perceive the existing state of inquiry; and, in the Monographs they will at once possess a library of the most valuable, select, and highly important authorities. To the student, the Record will also exhibit a most comprehensive view of the present state of obstetric knowledge, with all the advantages to be derived from the opinions of the leading members of the profession." Among the Monographs which the first volume contains, we notice Fischer on the Pelvis of the Mammalia—Dzondi on Congenital Fistulæ of the Trachea—De Graaf on the Female Testes—The Obstetric Aphorisms of Hippocrates, with comments, by Galen, Fucius, and others—Crantz on Rupture of the Uterus—Nægle on the Obliquely Contracted Female Pelvis—and the first sixty-four pages of the Encyclopædia Obstetrica, a work which we have abundant reason to believe will be of the greatest practical value to the Obstetric practitioner and student. We extend to Dr. Clay our thanks for the service he has rendered the profession at large, in the publication of this work; and not only wish, but believe he will receive that support and success which the intrinsic merit of his publications demand. We most cheerfully place the British Record on our exchange list.

ART. XIII.—*Clinical Midwifery, comprising the Historics of five hundred and forty-five Cases of difficult Preternatural and Complicated Labor. With Commentaries.* By Robert Lee, M. D. F. R. S. Fellow of the Royal College of Physicians, London; Lecturer on Midwifery, &c. &c. First American, from the second London edition. Philadelphia, Lea & Blanchard, 1848. 12mo. pp. 238.

This volume consists of eight Reports on different subjects of labor. These reports comprise the most important practical details of all the cases of difficult parturition which have come under the author's observations during a period of twenty years.

The first Report contains observations on the present state of Operative Midwifery, and the histories of eighty cases in which the forceps was applied.

Report second embraces cases of difficult labors, from Distortion of the Pelvis, Swelling of the Soft Parts, Convulsions, Hydrocephalus in the Fœtus, and other causes, in which delivery was effected by the operation of Craniotomy.

The third Report embraces the Induction of Premature Labor, in cases of Distortion of the Pelvis—Cancer of the Gravid Uterus—Uterine and Ovarian Cysts and Tumors—Organic and Nervous diseases of the Heart—Dropsy of the Amnion—Obstinate Vomiting during Pregnancy—Hæmorrage from the Bowels—Chorea and Insanity during Pregnancy.

Report fourth contains the histories of one hundred and one cases of Preternatural Labors.

The fifth Report comprises the histories of sixty three cases of Placental Presentation.

The sixth Report, the histories of forty four cases of Uterine hemorrhage, in the latter months of pregnancy, during labor, and after parturition.

Report seventh, the histories of thirty-five cases of Retention of the Placenta.

The eight Report contains the histories of forty-eight cases of Puerpural Convulsions.

After the enumeration of its contents, it is hardly necessary, perhaps, for us to add, that in our opinion, this volume, to the Obstetric practitioner, is one of no inconsiderable value. We shall freely draw upon it in our Retrospect for future numbers.

ART. XIV.—*An Introduction to Practical Chemistry, including Analysis.* By John E. Bowman, Demonstrator of Chemistry, in King's College, London. Philadelphia, Lee & Blanchard. 1849. 12mo. pp. 303.

This little volume, to the beginner in the study of Chemistry, is valuable. It fills what has been felt to be a desideratum in the acquirement of a knowledge of chemical science. In its construction and arrangement it appears to be as simple and intelligible as the present improved state of the science will admit. It points out to the indigent student the way and means by which that which is so great an obstacle to his progress and success may be avoided. The complicated and expensive apparatus, often thought to be absolutely necessary, has been almost wholly avoided; and in its place the student is pointed out the way by which the most simple and common domestic utensils may be used in their stead. The language used, and the directions given, are such as are in general, clearly and easily understood; and, in most cases, when doubt would be likely to arise, wood cuts are given in illustration. We would recommend this little book to the student as eminently calculated to facilitate his progress in chemical studies. Our thanks are due Messrs. Lea & Blanchard for an American edition.

PART THIRD.

FOREIGN MEDICAL RETROSPECT.

ANATOMY AND PHYSIOLOGY.

On the Changes which take place in the Lungs after division of the Pneumogastric Nerve.—By Dr. Schiff.—After section of the vagus nerves in the neck of an animal, death frequently takes place at an interval of a few days. In these cases the lungs are found to have undergone alterations, characterized by congestion, and the effusion of a large quantity of frothy sanguinolent serum in the bronchi; which leasions have been ascribed to the paralysis of the glottis, consequent on the section of its nerve, (the recurrent,) which induces respiratory obstruction, either directly, or by permitting of the passage of food and other matters into the trachea. According to the experiments of Dr. Schiff, these views are erroneous. By cutting the recurrents in some animals, and in others the pulmonary branches of the vagus, and watching carefully the results, he has convinced himself that the section of the latter causes congestion, with tumefaction of the bronchial mucous membrane; while that of the former produces norrowing and paralysis of the glottis without any pulmonary charges. In dogs the lesions of the lungs are likewise unaffected by the performance of tracheotomy, or by section of the œsophagus in the neck. He is led to believe that the state of the lungs is dependent upon the integrity of the pulmonary portion only of the nerve. Section of the nerve on one side produces a slighter amount of pulmonary lesion, but never confined to the lung of one side; a circumstance which Dr. Schiff accounts for by considering the anastomoses in the pulmonary plexus of nerves.—*Gazette Médicale* from *Archiv fuer Physiologische Heilkunde.*

On the Injection of Various Substances into the Veins. By Drs. Manzolini and Quaglino, of Milan.—The municipality of Milan having placed at the author's disposal a large number of stray dogs, they took the opportunity of injecting various substances into the veins, as pus of various descriptions, blood abstracted for different diseases, and a variety of putrefying substances. They then experimented with a variety of poisonous and medicinal agents, as arsenic, corrosive sublimate iodine, digitalis, quinine, &c. The following are the principal conclusions :

1. *Pus*, whether syphilitic, variolous, or tubercular, does not in-

duce corresponding specific affections in the organism of brutes, but constantly determines a gastro-enteritis and enlargement of the mesenteric glands. 2. Recent blood, though abstracted from patients with fever, small-pox, &c. exerts no effect on the health of animals. 3. The inorganic irritating poisons exert their action on the alimentary canal, inducing generally a gastro-enteritis. 4. This predilection for the intestinal tube seems to be due to the facility with which it becomes an eliminatory organ by reason of its vast superfices and its easy communication with the exterior. 5. The action excited by pus transported into the circulation explains the colliquative diarrhœa, and other gastro-enteric disturbances which individuals, suffering from large and old suppurating wounds, open cancer, phthisis, empyema, phlebitis, and gangrenous typhus are liable to. 6. Putrefying substances exert the same effects upon the canal as the irritant poisons. 7. Gastro-enteritis is not met with in those animals which die soon after the injection of these bodies. 8. All poisonous substances, organic and inorganic, whether introduced into the circulation by the veins, or by the digestive apparatus, constantly effect an alteration in the crasis of the blood. 9. That these poisons may exert their action upon the nervous system, it is requisite they should be transported into the circulatory current, the affection of the nervous centres being only secondary; in fact, when the stomach has been deprived of the influence of the par vagum by section, the same results are obtained as when this is uninterfered with. 10. *Vegetable poisonous substances* and their alkaloids, however, attack the nervous system in preference to the digestive tube. Some especially affect the brain, as opium: others the cerebellum and medulla spinalis, as the ethers; and others the medulla spinalis alone, as strychnia, quinine, *lolium tomulentum*, &c. 11. Two substances acting upon the same portion of the nervous system, but producing phenomena peculiar to each, when they are given simultaneously, do not confound their actions, but simultaneously manifest their proper phenomena. Thus by giving strychnia to a dog laboring under the tremors produced by *lolium tomulentum*, we engraft upon these the tetanic spasms peculiar to the alkaloid. 12. The venous and arterial tree is always found normal, whatever be the substance injected by the veins or administered by the mouth. 13. The remedies known as the narcotics and narcotic-acrids of authors (as aconite, belladona) never induce gastro-enteritis, however introduced. 14. Dilatation of the pupil may be induced by remedies which act on the encephalon, as well as by those which act on the medulla spinalis. In the first case, it is due to the torpor which the narcotic substances produce in the nerves of the third pair destined for the motion of the circular fibres of the iris, by which these antagonize the radiated fibres receiving their motor power from the cervical nerves. In the second case, the midriasis depends upon the spasm or excess of excitement of these last nerves.—*Brit. and For. Med. Chir. Rev.* from *Gaz. Medica di Milano.*

Blood Corpuscles of the Human Embryo. BY JAMES PAGET.—(Lon. Med. Gaz. Feb. 1849.)—Mr. Paget has examined the blood of an embryo about four weeks old, which is the earliest period recorded at which it has been submitted to a microscopical examination. The great majority of the red corpuscles presented a circular outline, and as they rolled over, appeared spheroidal and vesicular, or like cells filled, but not tensely, with a clear red jelly-like substance. Their surfaces were quite smoothe; and as they dried, instead of merely shrivelling and becoming granulated, portions of their edges were incurved, and folded towards their centres. They were apparently more fully colored of a deeply red than the blood corpuscles of an adult. The nuclei were circular with dark well refined outlines, and darkly nebulous, as if somewhat granulated. All the blood corpuscles of the embryo were thus nucleated. Some were double.

The spheroidal corpuscles measured from 1-2100 to 1-2800 of an inch in diameter: their nuclei from 1-3700 to 1-4500. The bi-nucleated corpuscles measured 1-1500 by 1-2300 of an inch, and their nuclei from 1-3700 to 1-4500 of an inch. The results of this examination show that in the earliest period of the human embryo, as in that of other mammalia, all the blood corpuscles an neucleated.

PATHOLOGY AND PRACTICAL MEDICINE.

Case of Hydrophobia Spontanea. By Dr. MOMBERT.—Such is the appellation bestowed by Dr. Mombert upon a case recently published by him, of a most interesting character in its details, though unfortunately imperfect, from the absence of a post mortem examination.

Dr. Mombert was sent for early on the morning of the 24th July, to see a lad (æt. 12,) who had been indisposed for a day or two before, apparently from having become chilled while hot. He found him with a slow and feeble pulse, pain in the head, contracted pupils, and difficulty of deglution; his secretions, tongue and skin being in a normal condition. While quietly talking, he suddenly started from the arms of his parents, struck his head with the rapidity of lightning, screamed aloud, and distorted his eyes and limbs in the strangest manner. In a few minutes all was calm, and he continued his narration. This paroxysm produced little effect upon his pulse, and was repeated with the same vehemence every few minutes; the attacks differing from epilepsy, in the retention of complete consciousness. Sinapisms to the feet, warm clysters, and calomel, were ordered.

Two hours after, the author found the parents vainly engaged in trying to administer a powder in water, the child declaring he could not swallow, and raging frightfully when they attempted to make him do so. He crushed the spoon between his teeth, and the fluid flowed out at the angles of the mouth. The same occurred when water or chamomile tea was offered. He ate an apple, however, thick potatoe-soup, and the like, with appetite. He declared his willingness to take anything, but that he could not get fluids down, and shuddered at there mere sight. No affection of the throat existed. The paroxysms of convulsions, screams, and raging continued, so that several strong men could scarce restrain him. As the carotids beat strongly, the pulse had become hard and quick, and the pain in the head was very great, cold was ordered to the head, and a venesection at the foot. But when the patient attempted to place his foot in water, the hydrophobic symptoms redoubled in intensity; and when, by the exertions of four men, he was made to do so, the ghastliness of his features evinced the anguish he endured. His respiration became short; he could neither swallow nor spit out his saliva; and now commenced biting those about him. For a while after the V. S., the paroxysm seemed less intense, but towards the afternoon they returned as badly as ever; his propensity to bite those about him, or even himself, increasing. When those who held him slackened their hold, he, in full possession of consciousness, entreated his friends to keep at a distance, lest he should bite them. No mitigation after this occurred, and he died at three in the afternoon. The most careful external inspection showed no traces of any bite; and his relatives felt certain he had not been bitten; and yet the symptoms were not to be distinguished from those which the author had witnessed in true hydrophobia. All the persons bitten by him continued well.—*Brit. and For. Med. Chir. Rev.* from *Wolther and Ammon's Journ.*

Case of Rheumatic Blindness. By Dr. Cramer.—The winter of 1847 was both long and severe, and during its course there occurred to the author several nervous affections, which seemed only due to exposure to cold, such as facial neuralgia, spinal irritation, St. Vitus' dance, ischiatica, &c. &c. In all these there had been exposure either to sudden change of temperature, or to the prolonged action of cold; and recovery took place on restoring the activity of the functions of the skin. But by far the most interesting case occurred in the person of a citizen's wife, who had suffered from cold feet during a ride in an open carriage. Previously in excellent health, to her utter alarm, she found herself totally blind, and so she had remained, in spite of all that was done for her, for eight days, when the author was called to her. He found a handsome woman of 34, having a florid complexion, and clear blue eyes, which, however, had assumed the lack-lustre appearance of the " poor stone blind. " The pupils were dilated and immoveable, but otherwise the eyes appeared normal. Her sight was *absolutely* gone, but in other respects she was quite well. The author prescribed Dover's powder, the drinking abundantly of elder tea, and the excitement of a strong counter-irritation, by means of antimony, at the nape. After eight days she began to perceive light, and in six days more saw as well as ever.—*Brit. and For. Med. Chir. Rev.* from *Casper's Wochenshrift.*

Fatty Degeneration of Cartilage—Microscopical Appearances.— By Mr. Wm. Adams, (*Med. Gaz. March* 30.)—If these portions of cartilage be carefully examined with the microscope, it will be evident that they are in different states of fatty degeneration. In these, in which the disease is least advanced, the solid contents or nuclei of the cartilage cells have become converted into very minute spherules of oil, by which the cells are more or less completely filled; this may be regarded as the first indication of the disease. In those parts of the cartilage in which the disease is in a more advanced stage, the spherules of oil, before noticed, by their coalescence have formed globules of various sizes, by which many of the cells appear distended and enlarged, and no trace of cell-membrane being distinguishable, these cells present the appearance of irregularly shapen cavities, excavated in the intercellular matrix, and filled with particles of oil. The intercellular matrix next undergoes the same morbid change as the contents of the cells and their cell-walls: This is indicated by the appearance of minute globules of oil, arranged either in irregular lines, and thus channelling the cartilage, or of globules congregated together in large cavities of various forms. When the disease is thus far advanced, and nearly all the cartilage is converted into oil, then those globules of this substance which were formed at the expense of the inter-cellular matrix, cannot be distinguished from those produced by the degeneration of the cartilage cells and their contents. Where this condition of the articular cartilages is accompanied with disease of the synovial membrane, the part of the cartilage nearest to the membrane is much more affected than that next to the bone, so that a vertical section of cartilage affected with this disease exhibits the fatty degeneration in all its stages, as can be seen in some of the accompanying specimens. In one specimen taken from another diseased joint, the bone connected with the affected cartilage is in a state of fatty degeneration, but this state is much less obvious in bone than in cartilage, from the difficulty which there is in obtaining sections of the former sufficiently thin to admit of examination with the microscope.

Hæmorrhage from the Umbilicus. By Mr. Ray.—Should the hæmorrhage, notwithstanding our precautions, occur, the administration of one or other of the remidies serviceable in purpura—as steel, gallic acid, &c. might perhaps be of some avail; but mechanical means must be adopted for *immediately* checking it; and in the employment of those means there must be *no delay*,—

no loss of time by repeating an unsuccessful attempt, as every drop of blood is of vital importance to so young an infant. Should such a case occur to me again, I should first attempt to control the bleeding by pinching up the umbilicus between the finger and thumb in the same manner as I should pinch up the integument to control the bleeding of a leech-bite, maintaining that pressure, if successful, and coating the umbilicus, first filled with cotton wool, over with collodium, or employ plaster of Paris, as suggested by Dr. Churchill, if at hand. But should it not be thus readily controlled, I should produce an eschar by means of a probe, director, or skewer heated to whiteness, coating afterwards with collodium.—If unsuccessful, I should then proceed to tie the bleeding vessel, and adopt the mode suggested to me by Mr. Hilton, first introducing a fine probe into the bleeding vessel, to act as a guide for the incision, as well as to diminish, perhaps, the loss of blood. I do not recommend the immediate application of the ligature in these cases, from the impression that they are so allied to the cases reported as illustrative of the hæmorrhagic diathesis; and, consequently, deem it possible that hæmorrhage of a dangerous, if not a fatal character, might arise from the wound necessary for its application.—*Med. Gaz. March 9th.*

Sloughing of the Vagina after Measles. By Mr. Parker.—Mr. Parker at the regular meeting, of the Liverpool Medical and Pathological Society, Feb. 8th, remarked upon the slight notice taken of this affection by systematic writers. He read a description by Sir W. Watson, published in 1763, of several cases of mortification of the pudenda occurring after measles, but they were generally in feeble children. Dr. Watson wrote of it under the title of Putrid Measles.

Mr. Parker's cases differed materially in this last respect, as nearly all the cases occurred in fine healthy children, who had no hæmorrhages or other signs of putridity. The sloughing commenced at various periods, from the first day of the eruption to the sixth after its disappearance. It was generally accompanied by diarrhœa, from which the patient sometimes sank, after having apparently overcome the effects of the sloughing. The gangrene, commencing in the labia, ultimately involved the whole vulva, perineum, and anus, extending deeply into the cellular tissue.

Death terminated *every* case generally in about a fortnight after the commencement of the disease. All the children affected were under four years old. Treatment did not produce any good effect. Two children were at the same time affected with sloughing of the mouth, and one with sloughing of the anus; all of whom also died. In the last case the anus alone was affected.

Only one post-mortem examination could be obtained. In this case the viscera were generally healthy, except the bowels. Peyer's glands were enlarged, the mucous membrane was generally hard and thickened, and there was slight ulcerations of the margin of the ilio-cæcal valve. Mr. Parker attached the most importance to preventive measures. The pudenda should be carefully washed twice a day, and if the slightest excoriation is present, the labia should be kept apart by lint and warm water.—*Med. Gaz. March 9th.*

Diseases of the Ear.—By J. Toynbee, F. R. S. (*Medical Gazette, Feb.* 23.) 1. The treatment of chronic inflammation, and thickening of the mucous membrane lining the tympanic cavity, consists in the use of leeches, followed by an ointment composed of a drachm of powdered cantharides to an ounce of simple ointment, or of the tincure of iodine, below the ears, and as near to the tube as possible. To the outer half or two-thirds of the external meatus a solution of nitrate of silver is to be applied every third or fourth day; the salt is to be dissolved in water, and its strength may vary from half a drachm to a drachm of the salt to an ounce of water. In some cases the surface of the membrane tympani is to be washed with a weak solution of the nitrate of silver, from four to six grains to an ounce of water. Where the mucous membrane of the fauces is thick or relaxed, astringent applications should be made. Small doses of blue pill, the bichloride of mercury, or mercury with chalk, should be administered, not with the object of producing salivation, or any depression of the system, but to aid the local applications in promoting absorption. Warm bathing, exercise in the open air, the avoidance of wine and stimulants, and of close and warm rooms, should be strictly enjoined. Under this treatment, cases of deafness of many years' standing have been cured or relieved.

2. Catheterism of the Eustachian tube is an operation very rarely called for; in nine cases out of ten, by means of the otoscope,* air is distinctly heard to enter the tympanic cavity, or there are other unequivocal symptoms indicative of the pervious state of this tube; † practical experience with the deaf quite agrees with the result of the dissections of the Eustachian tube.

3. Besides the otoscope, in order to arrive at something like an accurate diagnosis of the nature of ear diseases, it is requisite to use a small lamp and a delicate silver speculum. By means of the two latter instruments the exact state of the meatus and membrana tympani can be ascertained. It will be observed that the latter structure is not unfrequently more concave than natural—a condition which is produced either by direct adhesion of the membrana

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* An elastic tube, twenty inches in length, each end being tipped with ebony; one extremity is introduced into the external ear of the patient, the other into that of the surgeon, while the former attempts to make a forcible expiration with closed nostrils.

† Although the air is heard to enter the tympanic cavity, it does so with the production of a variety of sounds, as a puffing, bubbling, and cracking, according to the condition of the mucous membrane of the tympanum.

tympani to the inner wall of the tympanum, or through the agency of membranous bands, or by a contraction of the tensor tympani muscle.

4. The principal disease observed in the fenestra rotunda consists in the presence over it of a distinct false membrane, which is attached to the margins of the fossa fenestræ rotundæ; the latter fossa is often completely filled up by the thickened mucous membrane of the tympanum.

5. Many deaf persons, as in the case of one of the patients in whom there was found to be complete anchylosis of the stapes to the fenestra ovalis, hear musical sounds when sonorous vibrations can be made to act upon the nervous expansion, as through the medium of solids.

6. My experience has not been sufficient to indicate by the kind of deafness the particular part of the ear affected.

7. As a rule, I have not found the fluids of the labyrinth deficient in old persons, but the mucous membrane of the tympanum and the membrana tympani have been the seat of the disease.

8. Some deaf persons hear better in a noise, as in a carriage, than when quiet, because the fluid of the vestibule is thrown thereby into a state of undulation, and in this state can receive the vibrations of the thickened membrana of the fenestra rotunda, which are much less powerful than is natural; indeed, supposing the views on the physiology of the tympanum advanced by Mr. Brooke to be correct,—and thus far all my researches tend to establish their accuracy,—in those cases where the stape is so firmly fixed as not to be able to press upon the labyrinthous fluids, and give them a certain state of tensity, the vibration produced by a carriage, or by a loud sound, would in some measure be a compensation.

9. In some deaf persons there is an over-sensibility of the nerves of the ear; and a loud sound, or a loud voice, aggravates the malady by causing a forcible contraction of the muscles of the internal ear, and a rigid state of the membrana tympani.

10. Tinnitus aurium is probably dependent upon the constant compression of the contents of the vestibule, and by the pressure inwards of the stape by means of rigid bands of adhesion, thickened base of the stapes, &c.

11. There are cases where loud reports produce a rupture of the membrana tympani; others, in which the hearing becomes gradually dulled, as in the right ear of sportsmen. I have not been able to dissect any cases tending to elucidate the pathological condition.

Congenital Closure of the Aorta at the Semilunar Valve.—By Mr. Canton.—(*Lon. Med. Gaz. March* 30.)—The child was a female, and born at the full term of pregnancy. It lived for two days, and died in convulsions, having been till their occurrence apparently in good health. The heart was natural in size and normal in situation; the cavity of the right auricle and ventricle was much enlarged; the pulmonary artery was in the same condition. All the carnaæ calumnæ on the left side were, so to speak, fused together, so as to obliterate the ventricular cavity, and present in lieu of it a solid mass. The only trace of ventricle was at the upper part of the latter, where was a little hollow space, of a rounded form, just capable of holding a small pea, and presenting within slight traces of chordæ tendinæ and mitral valve. The *ostium aortæ* was perfectly closed, and, on opening the ascending portion of the arch above from below, two small folds of the lining membrane indicated the site of the sigmoid valve. The left auricle was natural, the foramen ovale large, and the coronary arteries arose at their usual place, and ramified in the ordinary manner.

Analysis of the Fluids in Cholera.—M. PELOUZE at the sitting of the Paris Academy of Sciences, on the 12th of February last, communicated the results of the chemical analysis of the fluids of cholera patients. These analyses were made at Lille, by M. Corenwinder.

The object of these analyses was to ascertain the precise amount of albumen and common salt contained in the fluids; and for this purpose the liquid of the stools, the blood, and the fluid matter taken from the intestines after death, were each investigated.

The liquid of the stools was found to be either altogether wanting in albumen, or to contain it in but small quantities. Three analyses gave the following results:—

	Albumen.	Common salt.	Water.
1	0·28	0·384	98·76
2	nil	0·380	98·96
3	0·086	0·504	98·18

The fluids taken from the intestines furnished proportions of albumen varying from 1·5 to 2·2 per cent.

The following quantities of salt and of water were found in the blood taken from the body after death:—

Chloride of sodium.	Water.
0·185	75·330
0·275	75·110
0·212	75·110
0·069	71·000

Lastly, the composition of the serum taken from the system during life was represented by the following numbers:—

Water	87·000
Albumen	9·558
Salt	0·531

In examining the results of these experiments, M. Corenwinder draws from his investigations the following conclusions:—

A notable quantity of albumen is found in the liquids of the intestines; very little dry matter, little or no albumen, and much common salt, in the liquids of the stools. The proportion of dry matter inceases in the blood, and the quantity of salt suffers a variable diminution, up to one-fifth of the weight of the blood in its normal condition. Lastly, the composition of the serum does not suffer any notable variation.—*Med. Gaz. March 9th.*

Treatment of Malignant Cholera.—The following comparison of various modes of treating malignant cholera is taken from a review of several recent writings on this disease in the *Monthly Journal*, 1849:—

Blood-letting.—In reference to this, the evidence is conflicting. It has been employed with alleged benefit in all stages of the disease in this country and in India. In the early stage it has been effectual in relieving the feeling of oppression on the chest. Its effect on the mortality is not evident. Dr. Robertson, in his statistical account of the cholera in Edinburgh, during the present epidemic, states that he has in many instances prevented collapse by this measure.

Stimulants.—According to M. Ross' tables, stimulants given to any extent appear to have been injurious.

Opium.—There seems no reason to doubt its efficacy in the early stage; but, according to the tables above mentioned, it does not diminish the mortality.

Mercury has not been followed by remarkable success in this country, except in the hands of Drs. Ayres and Peacock, both of whom use it without stimulants. In their experience the mortality was reduced to thirty-one per cent. Dr. Fleming advises the use of a solution of the bichloride, as more readily absorbed.

Tartar Emetic in small doses, with cold water, *ad libitum*, has in the Droitwich Asylum afforded the largest per centage of cures, the deaths being only four in twenty-four cases.

Injection into the Veins has afforded no satisfactory results.

Chloroform has been used by inhalation in thirty-seven cases. The results are inferior to those witnessed in the Droitwich Asylum, but superior to the general results exhibited in Ross' tables.—*Med. News and Library.*

Conclusions respecting the Mode of Propagation of Cholera in Russia in 1847–48. By Dr. Frettenbacher.—Dr. Frettenbacher, of Moscow, in an elaborate statistical report of the progress and ravages of cholera throughont the Russian Empire, during the last two years, gives the following general conclusion as the result of his observations on the subject of its propagation:—

1. Intermittent fevers had prevailed throughout the whole extent of the Empire, previously to the appearance of the cholera.

In 1846 they had assumed in many places an epidemic character. In 1847, when the cholera appeared these fevers ceased, and they reappeared as the cholera declined.

2. The cholera was preceded, almost invariably, by disorders of the digestive organs and intestinal canal. These derangements increased with the appearance of cholera, and decreased in severity as it disappeared. They prevailed throughout the whole extent of Russia in Europe, even where cholera was not present.
3. The cholera followed the course of large rivers and the chief lines of human intercourse. Prevailing winds had no influence on its progress.
4. When the cholera appeared in places out of its principle route, it was generally found to have manifested itself shortly after the arrival of persons from districts where the disease was prevailing.
5. In localities where the cholera was thus conveyed by individuals, it did not always spread as an epidemic, but those only who came in contact with the affected had the disease, and if it did spread epidemically under these circumstances, its progress was very slow.
6. In many places the cholera appeared in an epidemic form, without any communication with infected districts, under the influence of general causes, of which we have as yet no satisfactory explanation.
7. The cholera propagated itself especially in low situations, in unhealthy and confined dwellings, where the inhabitants were previously debilitated by disease, intemperance, and other depressing causes.
8. Some localities which, from accidental circumstances, were carefully insolated, such as large establishments, and even entire villages, completely escaped the visitation.

The preceding facts prove that this disease, originally epidemic, may become energetically contagious; or, in other words, communicable from man to man.—*Med. Gaz.*

SURGERY.

On the Employment of Aqua Saturni in Strangulated Hernia.—By Dr. Neuhold.—The object of this communication is to recommend, by additional examples of its utility, the practice instituted by Neuberg and Seitl, of administering enemata of the *aqua saturni* for the relief of strangulated hernia. The author states his firm belief that, were this practice more known and followed, operations would be of very rare occurrence. The injections have been employed by him under very different circumstances, with the same success; and he has never known any harm result from them, even when from 4 to 6 clysters, each containing 10 grs. of the acetate of lead, have been thrown up He furnishes some particulars concerning four cases. In one an excessively large scrotal hernia resisted the taxis and all other means for 28 hours; and, the patient, refusing to consent to an operation, 10 grs. of the acetate of lead were dissolved in 6 oz. of water, and thrown up lukewarm, the same being ordered to be repeated every two hours. The pulse, which had been small and contracted, soon became more developed, and, in fact, from hour to hour the general condition improved; and when the man fell asleep the bowel spontaneously returned. In another case of inguinal hernia, the author was not called in until strangulation had continued for three days, and given rise to the worst symptoms. The patient's condition improved much after the use of the clyster, and the rupture was easily returned by the taxis.—*Brit. and For. Med. Chir. Rev.* from *Oester. Med. Wochenschrift.*

Cases of Gunshot Wounds.—By G. D. Gibb, M. D.—The following interesting, and some of them remarkable cases of gunshot wounds of the head and face, we abstract from the October number for 1848, of the British American Journal of Medical and Physical Sciences. Their value is the only apology the editor offers for their aggregate length. In a future number we will give the reader those of the chest, abdomen and extremities.—*Ed. New-York Jour. Med.*

The following cases of gunshot wounds of the head and face are some of the most interesting which occurred in the city of Paris during the eventful days of June. I have necessarily abbreviated them for fear of occupying too much space in the columns of your Journal; and on a future occasion shall send those of the chest, abdomen and extremities, if you think them worthy of insertion; I may remark, that they formed the subject of a paper which I read before the Parisian Medical Society.

The first case is that of an elderly man, (a National Guard) in the hospital of *La Pitié*, with a gunshot wound of the head; the ball had entered the right side of the forehead, penetrating the frontal bone and becoming lodged in the cavity of the skull; on the 24th July he presented the symptoms and appearances of a man laboring under organic disease of the brain, his brows were contracted, there was a peculiar stupid expression about the face, stiffness of his limbs, with nervous agitation and slight subsultu; the wound itself was circular with irregular margins, and much larger than an ordinary musket ball, puss was oozing from it, and its centre was occupied by a greyish slough, a portion of the dura mater. A week after he appeared much improved, was more collected, and answered questions rationally; the wound was still suppurating, and the rise and fall of the brain synchronous with the respiration, was beautifully seen; he complained of pain all over the head, but particularly at times near his left ear. At the present time there is a great improvement in his appearance, his face appears quite calm, with a little fullness about the right eye; his faculties are perfect, he sleeps frōm five to six hours nightly; his appetite is improving, and his pulse 72, quite soft and compressible; he complains of soreness at each side of the occiput; the wound is coming on very well, and is now closing, and the discharge of pus is greatly diminished. The surgeon, M. Michon, lately removed some small splinters of bone, and this morning (24th August) removed a few more from the wound. The man's feelings and appearances are such, together with his general improvement, as to permit of the most favorable prognosis.

2. Case in the *Hopital Beaujon*, of a captain of the 27th Regt. of the Line, who had received a wound in the head in June, the ball entering the skull a little above the supra-orbital ridge of left side, fracturing it, passing through the substance of the brain, and making its exit behind the left ear through the squamous portion of temporal bone, and grooving the mastoid process externally; a portion of the cerebral substance escaped through the posterior wound at the time of its infliction, and an abscess subsequently formed under the integument at the back of the ear, which was opened about 17th July. This patient, on admission in June, was highly delirious, requiring to be forcibly held down, and was copiously bled. 7th August his intellect is wavering, he talks all sorts of nonsense, and addresses the surgeon M. Roberts, as "*Mon Gènerale.*" His left eyelid is closed, the eyeball is not destroyed, but the sight is entirely gone; the wound anteriorly has healed to the size of a large pea. From this date he became gradually worse, and died on the 10th instant. *Autopsy.*—That part of the brain traversed by the ball, and to some extent around, was a mass of thick pus; a portion of a musket ball, (about one-third,) of an irregular form, was found near the internal surface of the posterior wound, evidently detached as the ball was passing through the temporal bone; almost the entire brain was in a state of ramollissment, and the latteral ventricles were filled with sero-purulent fluid.

3. A frightful looking case of an elderly man in *La Pitié*, wounded in June; a musket ball had entered the skin in front of the right ear, passing forwards anteriorly, carrying away a portion of the malar bone with fracture of the frontal bone, and destroying the eye: extensive sloughing followed, leaving a most terrible wound; The surgeon, M. Michon, stated that on admission the cerebral substance was exposed; he had, however, been very actively treated, and is now doing well, but will be much disfigured. This case presents some points of interest, the extensive fracture exposing the brain without lesion of its substance, the total loss of the eye, and the occurrence of the wound from a shot fired nearly behind the man.

4. A case in the *Hotel Dieu.* A wound produced by a ball on the right side of the vertex of the head from before backwards, laying bare the skull, but without a solution of continuity in its substance; the patient had paralysis of the left arm, with loss of sensation and motion supervening on receipt of the injury, which, however, disappeared in a few days. The bone is exfoliating, and the case otherwise doing well.

5. Case of a soldier of the Line in the *Hopital Beaujon*, where a fragment of a ball had struck the right side of frontal eminence, fracturing both tables of frontal bone, and becoming lodged in the diploe, the brain and its membranes were uninjured. The fragment was removed, suppuration of the wound commenced without any bad symptom, and the patient was discharged well, about a week ago.

6. Case in the *Hotel Dieu* of a Garde Mobile; where a ball had struck the right incisor teeth of inferior maxillary bone, fracturing them, and passing through the right side of floor of the mouth into the substance of the neck on the same side, where it still remains. The wound in the mouth has healed, the two central and right lateral incisors, canine, and one bicuspid tooth are gone, the fracture has united, but the callus is not yet absorbed, and there does not exist that amount of suppuration to be naturally expected from the lodgment of the ball. The shot was fired from an upper window near one of the barricades.

7. Case in the hospital of *St. Antoine*, of a soldier of the Line, where nearly all the upper lip, a portion of the septum of the nose, the alveolar process with front teeth of upper jaw, and a small part of the front of the roof of the mouth were shot away by a musket ball; the severe wound resulting is now nearly healed, excepting some redness and swelling on left side of the face near the nose. The surgeon, M. Nellaton, intends very shortly to remedy the deformity by a rhinoplastic operation.

8. An interesting case in *La Charité*, where a musket ball had passed completely through the face of a Garde Mobile, aged 17, entering on the right side through the malar bone, and passing out of the same bone on the opposite side; there is little or no deformity, and both wounds have perfectly healed.

9. A case equally interesting, in the *Hopital Beaujon*, of a Gardé Mobile. A musket ball entered the right side of the face, at the side of the ala of the nose, passing through the superior maxillary bones, and emerging through the cheek in front of the anterior border of ascending ramus of left side of lower jaw; a number of the left upper teeth were lost here, and the remainder are quite loose and ready to drop out. There is some deformity on the right side of the nose, from present redness and swelling near the wound, but the case is otherwise progressing favorably.

10. Case in the hospital of *St. Louis*, of a soldier of the Line; where a ball had entered the superior maxillary bone under the left eye, close to the malar bone, where it was lodged; it was extracted the day of admission in June, and now the wound is perfectly healed, and the patient discharged.

11. Case in the *Hotel Dieu*, of a Garde Mobile. A ball had entered the left cheek near the angle of the mouth, passing obliquely downwards, and backwards inside of the lower jaw, escaping under it, and emerging in the border of the trapezius muscle; a highly interesting case, as the jaw was not fractured, nor the carotid artery

wounded, and the course of the ball was slightly circuitous; it is doing very well, with some suppuration from the posterior wound.

12. Case in *St. Louis*, of an insurgent where a ball struck the external angular process on right side of frontal bone, fracturing it, and passing inwards into the socket of the eye, where it was lodged; extensive inflammation of the eye followed the receipt of the injury, which was treated antiphlogistically, and is not even now subdued; the eyelid remains closed, and there appears to be a partial collapse of the eye itself. The ball was extracted with some difficulty on the 16th, and in three days after, the patient was removed to the prison of St. Lazare, much improved, but with very imperfect vision.

13. A case in *Hotel Dieu*. A ball entering over the nasal process of superior maxillary bone, on left side of the face, passing downwards under the integument, and coming out through the lip, over the canine teeth of same side; the ball did not penetrate the deep structures of the face, and the shot was fired from an upper window of a very high house, the patient (a National Guard) being in the street below. No bad consequences followed, and the wound is perfectly healed.

14. Case of a National Garde, aged 30, in *St. Louis*. A ball had passed through the ala and septum of the nose from right to left, traversing them in such a manner as to leave their inferior borders intact, and at same time not to injure the ossa nasi. The orifice of the wound had contracted after the passage of the ball, and was small and irregular. The surgeon, M. Jobert, feared serious consequences might possibly arise in this case, as he thought erysipelas would follow upon the wound of the cartilage, while at same time a shock communicated through the vomer might have been sufficient to do some injury to the small bones at the base of the skull; fortunately this last supposition was incorrect, and no bad symptoms indicating the occurrence of any such injury followed. Erysipelas did, however, attack the wound about the 4th day, and spread rapidly over the face, it yielded to proper treatment in three or four days, and the case then progressed rapidly without further mischief, permitting of his discharge in the fourth week, cured.

15. Case in the *Hotel Dieu*. The ball had entered the mouth just below and to the outer side of its left angle, passing backwards and making its exit near the posterior border of the ascending ramus of left side, fracturing the horizontal ramus of the jaw in its course; this case is doing very well, some fragments of the bone have come away through the mouth, and a little deformity remains at its angle.

16. Case in the *Hopital Beaujon*, of a soldier of the Line, who had fallen against a large stone while storming one of the barricades, severely wounding his right cheek, and sustaining a compound fracture of the lower jaw; the wound in the cheek is now healed, but the fracture has not perfectly united; from the wound under the chin some of the comminuted portions of bone have come away during suppuration, he can open his mouth a little, and is fed on a spoon diet.

17. Case in *La Charité*, of an insurgent, aged 28, who was standing beside a barricade when a cannon ball struck it, causing splinters and fragments to fly in all directions. He was severely wounded by the latter, one mass striking him on the left forearm just above the wrist, tearing away the skin and muscles, for a space of three inches, but without fracturing the bones. Another struck him on the left side of the chin and neck carrying away the front of the lower jaw, with portions of the muscles attached to it, thus producing a most terrible lacerated wound the size of the hand, with rough edges, the skin having also been torn away from the front of the neck as low down as the middle of the thyroid cartilage; the lower lip, which bounded the wound above, remained almost intact, whilst the tongue and thyroid cartilage were completely exposed. Greased charpie was at first the only dressing applied, changed afterwards to poultices; the wound progressed more favorably than could be expected, no very bad symptoms ensued, and by the 23d August it had cicatrized, leaving the patient much deformed, but still possessed of the power of distinct articulation.

18. Case of an insurgent also in *La Charité*. He received a wound in the neck from a bayonet, which had entered just below the angle of the lower jaw on the right side, almost directly in the line of the carotids; it seemed as if the instrument had pushed them aside in its course; it passed upwards and slightly forwards, piercing the root of the tongue, passing between the teeth, and finally perforating the centre of the left cheek; no hemorrhage occurred, the orifices of the wounds were contracted, very small, and slightly triangular; they healed very quickly, as did also the track of the wound, and the patient was one of the first sent from the hospital to the prison.

19. Case in *La Charité*, of another insurgent. A ball struck the left cheek, passing through it and then the dorsum of the tongue, escaping through the floor of the mouth, on the right side. When brought into the hospital his tongue was strongly retracted, and suffocation from this cause so imminent that the surgeon, M. Velpeau, was obliged to draw it forward and secure it by a suture. On the second day he was still suffering from impeded respiration, owing to the enormously swollen state of the tongue, which now protruded from the mouth for two inches, and almost filled the circle of the lips, it was dry and brown on its upper surface, and fissured; the rest was of an intense red. He could not speak, and made known his feelings and wants by writing; he described particularly the sense of immediate suffocation, and expected to die almost hourly; this was much increased when in the recumbent position, he was therefore obliged to pass several days and nights sitting on a chair, resting his head upon the bed in front. On the 4th day a copious salivation commenced, which, by keeping his tongue constantly moist, added greatly to his comfort. As the inflammatory symptoms subsided, the tongue gradually diminished in size, and his respiration became easier and more comfortable. 23rd August. The

wounds are healed; he now breathes with freedom, his tongue protrudes for about an inch, and can be drawn a little inwards, and he can articulate indistinctly. No particular treatment was adopted in this case.

ON THE OPERATION OF TYING THE SUBCLAVIAN ARTERY INTERNAL TO THE SCALENI MUSCLES.—By WM. HARGRAVE, *Professor of Surgery to the Royal College of Surgeons in Ireland.* (*Dublin Journal of Medical Science, for February.*)—The causes of the failure in this operation appear to me to be owing to the four following sources: 1st. To the anatomical position and relations of the vessel. 2nd. To the great disturbance, perhaps destruction, of the nutrition of the artery, caused by the difficulty of the operation. 3rd. To the tension of the artery after the ligature is tied. 4th. To the pathological conditions of the artery itself.

1st. As to the anatomy of the vessel and its relations, independent of the intricacy of the latter, and the consequent difficulty in laying it bare, it differs in one respect from every other artery in the body which is required to be secured in its continuity, namely, after the artery is tied it can be relaxed by position, which allows of great repose and a certain amount of quiescence, and so removes any strain caused by the ligature on it; this desideratum cannot be obtained for the subclavian, in consequence of the presence of the clavicle, which offers an insurmountable resistance to relaxing the artery after being secured. Place the extremity in any position, still no relaxation will follow, the consequence of which is that the vessel is kept in a state of tension, in all probability increased by the ligature.

2nd. The disturbance of the nutrition of the artery, perhaps its destruction, by which I indicate the injury inflicted upon its vasa vasorum, and the small quantity of cellular membrane in which it is imbedded; the often tedious proceeding—in many cases inevitable, to expose the artery with security to the important parts in the vicinity of which it is situated, destroying too many of the nutrient vessels, and thus depriving the artery of the sources from which the processes necessary for the effusion of plastic lymph and of adhesion are obtained. It is this injury inflicted upon the nutritious arteries of the vessel, which favors the occurrence of hemorrhage, and prevents the effusion of lymph where the ligature has been applied, which is corroborated by the condition of the vessel after death.

3rd. The increased tension of the artery should be always kept in mind. The effects of this cause are well established in Dr. Hayden's case, "The artery at the site of the ligature was gaping irregularly for three-fourths of its calibre, one-fourth sound and retaining the ligature;" and in Mr. O'Reilly's case "the divided extremities of the artery were patulous, and separated nearly two inches by coagula; their edges were jagged and irregular, and there seemed to have been not the slightest attempt at the reparative process;" the arteria innominata was sound and the heart natural. What reparation could have filled an arterial space of two inches?

4th. If the artery is diseased at the place where it is tied, failure is inevitable.

Such seem to me to be the causes which mainly act in rendering the operation, as hitherto performed, unsuccessful; can any of them be obviated? I incline to the opinion that the chief one can, namely, the impediment to a quiescent, if not an absolute state of repose for the artery, the want of which has been already pointed out.

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The mode of conducting the operation I propose would be, after the vessel was exposed and encircled in the ligature, carefully to saw through the clavicle about its middle, having previously guarded the subjacent parts with a spatula. If any alterations followed this step in the relations of the artery they would be of little consequence, it being noosed prior to the section of the bone; no delay or hindrance would then prevent the tying of the artery. The action of the muscles which draw the shoulder to the trunk, as the subclavius and pectoralis minor, should then be aided by position, and the arm retained *in situ* by a bandage.

NEW OPERATION FOR CONGENITAL PHYMOSIS.—By W. COLLES, F. R. C. S. *(Dublin Journal of Medical Science for February.)* —I have been in the habit, for some time, of removing the deformity by a simple and very effectual operation. I seize the edge of the prepuce, at its fold forming this narrow band, in the left hand, and holding the scalpel in the right, and at right angles with the penis, I remove a circular portion of skin, about a quarter of an inch wide. The outer fold of skin being loose, is then drawn back on the penis, leaving the glans covered by the inner and tighter fold. I then divide this layer about half way back, more or less, slitting it up exactly in the centre, by passing a sharp-pointed bistoury under it. We have now the outer fold of skin loose, with a large circular orifice; the inner, or more contracted portion, presenting also an orifice, but larger by double the perpendicular incision, which forms two angular flaps.

I then turn these flaps outwards, and by a suture attach each angle to the edge of the external skin, at about a quarter of its circumference from the frænum; a slight suture at the frænum completes the operation. I then draw all forward so as to cover the glans.

In two or three days I remove the sutures, and generally find the wound healed, leaving a covering for the glans, differing in no respect from the natural and perfect prepuce; and in some cases it would be difficult to know that any operation had been performed, or that any had been required, on this part.

MIDWIFERY.

Anomalies of the Menstrual Functions in relation to Fecundation. By M. PAUL DUBOIS.—M. Paul Dubois has recently illustrated some of this at his Clinique by several cases. Two young women commenced menstruating at 11 and 12, and were confined at 13 and 14½. Such cases of premature nubility, coinciding with a precocious condition of the rest of the body, are by no means rare; and they may be contrasted with certain examples of tardy menstruation, which gives rise to very embarrassing questions. In one of this the woman was not regular until 21; and in a similar case, in which M. Dubois, sen. was consulted, he, having found, on examination, the genital organs normal, sanctioned marriage; but the person never became pregnant. Still, there are cases on record in which women have become mothers without menstruating; and M. Dubois relates one in which menstruation first occurred after the eighth confinement. Again, aged women have become pregnant after ceasing to menstruate. A woman, æt. 21, now pregnant, was regular at 12, and has never been so since. In civil practice a cessation of the menses is considered a principal sign of pregnancy; but in legal medicine it is of little account, for it is well known how subject this flux is to arrest by many moral and physical circumstances. In many newly married women the menses become suppressed for awhile, and then return in augmented quantity, giving rise to the belief in the occurrence of a miscarriage. But for this there has been no foundation, the suppression arising from change of habits on the part of the woman. The persistence of menstruation after fecundation is an anomaly of less frequent occurrence than is popularly believed; for it is wrong to confound with this a slight accidental flux of blood, which usually occurs at quite irregular intervals.—*Brit. and For. Rev.* from *Rev. Méd. Chir.*

Cauliflower Excrescence of the Os Uteri.—By MR. LEE.—The following is the result of Mr. Lee's microscopic investigations into its composition in a case which came under his notice:—Under the microscope the globules were found to be covered individually by epithelial scales resembling those of the mucous membrane; and each was composed of nucleated cells, with here and there a blood-vessel ramifying on it, but the tumour was not apparently vascular. The edge of the lobules, with epithelial scales, appeared as if impacted one upon another; beneath which, from its circumference, where the cells were much compressed, to its centre, cells became gradually developed. There was no appearance of fibrous tissue, nor any of the caudate cells indicating cancer. This, then, was the result of a careful examination of a part of this tumour removed during life. The following is a description of a portion examined the same way after death:—When a piece of the tumour, the only remains of which were in small detached clusters, was taken and placed in water, it appeared to be made up of a number of villi, apparently attached to a central substance of more firm consistence.

It was composed of nucleated cells of large size, some circular, some oval, and others elongated oval; these contained a quantity of granular matter and a well-defined nucleus, which appeared to contain a cavity filled with a quantity of granular matter. The two together had the appearance of a cell within a cell, or a compound cell. These cells were connected by fine filaments like cellular filaments. From this examination we conclude that the tumour is composed entirely of cells, and that these are covered by an epithelial membrane; also that it was of simple structure, and not malignant. In cases of this kind there has been observed an immense discharge of a watery fluid. This was investigated also. It was of a brownish color, tenacious to the touch, and of a faint odor; it had the appearance, when in large quantities, of saliva colored. Under the microscope we found that it was composed of an immense number of nucleated cells, principally of an elongated oval form, containing some granular matter, and each cell was provided with a distinct nucleus; a quantity of granular matter was seen floating in all directions in a thin fluid, which contained a number of epithelial scales. These appearances go far to establish the opinion proposed by Dr. Anderson, that the discharge is dependent on the effusion of cells from the blood-vessels, and thus its great exhausting power is explained.—*Brit. Rec. of Obstet. Med.*

ABSCESS BETWEEN THE VAGINA AND RECTUM.—By DR. CLAY.—This is a complaint of occasional occurrence, and may take place at any period of life. It is often the result of violence, such as falls, blows, kicks; and it has also arisen from the passing of the child's head along the vagina in hard labor, still there are cases which cannot be traced to any satisfactory cause. Dr. Churchill mentions a case after an attack of acute uterine leuchorrhæa. Inflammation of neighboring parts may so extend as to implicate the parts under consideration. A case of this kind is mentioned by Dr. Davis, in his obstetric medicine, vol. 1. p. 145, and by Chomel in the Lancette Francoise, June, 1838. Whatever be the case, there is severe pain in the part, a sense of weight, great tension, constant bearing down, particularly in the upright or sitting position, and in the act of passing a motion; and on making a vaginal examination, a tumor is felt between the vagina and rectum, or a little inclining to one side, great tenderness to the touch, and the parts feel of a high temperature. A curious case is related by M. Louis, at the Hotel Dieu, Nov. 1837, of a fatal case of abscess, which after death proved to be one of vagino-rectal character. The inflammation runs rapidly into suppuration in these parts, often the abscess will be matured in 48 hours, after which the painful symptoms considerably abate, but others are developed. The tumor is now softened, and fluctuation may be detected, and an apex discovered either in the vagina or rectum. If not interfered with, an opening is soon made into vagina or the rectum, through which the pus escapes, which is extremely fetid. Sometimes the abscess does not open at the apex as we expected, but burrows to some distant part, and fistulous openings may sometimes be found outside the orifice of the vagina, as well as in its walls, or in the walls of the rectum. After the pus is discharged, the tumor subsides, and if the sac is not obliterated, the discharge may go on for a considerable time. Occasionally the orifice has been known to close, and the sac to refill, which secondary abscess must be treated as before, but with more caution as to its termination. Sir C. Clarke relates cases of this kind; where there is a disposition to form fistulous sinuses it is more than probable that the tone of the constitution wants improving. During the early stages of inflammation there is considerable amount of fever, weariness, aching limbs, head ache, thirst, quick pulse, restlessness, and irritability. Rigors point out the formation of pus, and then the other symptoms subside, followed by debility and exhaustion, if the discharge be continued any length of time, and sometimes irritative fever. All these points are of a more serious character if they follow labor. In some cases there is a sympathetic enlargement of the inguinal glands, but which subsides after the abscess is terminated. It is necessary to diagnose abscess from some other diseases. The sensation of weight and bearing down, might lead to the suspicion of prolapse of the uterus or vagina, but on examination the uterus is found in its proper position, and the vagina normal with the exception of a tumor, hard, tender, and perhaps fluctuating, and which cannot easily be mistaken for a lodgment of fæcal matter in the rectum, particularly if the precaution is taken of administering an enema before the examination. An abscess may sometimes be confounded with tumors of other descriptions in the parts, but the acute symptoms, and rapid progress, will soon identify the abscess. As regards the treatment, leeches, fomentations to the vulvæ and perineum, saline purgatives, &c. If pus is likely to be the result, fomentations, poultices, injections of warm water into the vagina, and every means which is likely to facilitate the suppuration. When matter is formed the abscess must be punctured at the lowest point, and the pus completely evacuated, to prevent its burrowing to some other situation. If the orifice be sufficiently large, the abscess heals generally favorably. The vaginal passage should be frequently washed out with a syringe, and it will be necessary to introduce a piece of sponge to compress the walls of the sac, and prevent the accumulation of fresh pus. If fistulas be formed, they must be treated as fistulas generally. The bowels should always be well attended to, and if this disease has been of long continuance, and is telling upon the constitution, tonic medicine and a generous diet will be necessary.—*Cyclopædia of Obstetrics.*

Prolapsus of the Umbilical Cord.—By Dr. Rigby.—Is either produced by too great distention of the uterus from liquor amnii, or from the lower portions of the uterus not contracting sufficiently about the child.

Preserve the membranes unruptured as long as possible; so long as this is the case the cord is in little danger.

If the passages be well dilated, and the pains active, you may venture to deliver with the forceps; if not, you must turn the child. Some have succeeded in carrying up the cord upon their hand, and hanging it upon some part of the child, and then allowing the head to descend.

Where the cord is without pulsation and flaccid, there will be no need of interfering.

Mammary Secretion. By DR. PEDDIE.—The best artificial nourishment is cows' milk, but diluted from one-third to one-half, sweetened according to the age of the child, as it is richer than human milk. The milk of the goat and sheep are nearly similar in strength, and that of the ass is lighter; but were the taste and smell of all these agreeable to every child, they are not generally and regularly procurable. The "*pan and spoon*" system is unquestionably pernicious to newly-born children; but when the fourth month is attained, then supplies of rusk, arrow-root, barley-meal, and other light farinaceous food, may be begun in small quantities, and varied as they are found to agree with the infant

Children of tall spare women are said never to thrive on the milk of those who are short and stout.

Too much weight, I believe has been attached to the complexion of nurses, as to whether dark or fair women are preferable. Those who present a medium aspect are the best, always keeping in view the other qualifications desirable.

When the milk is found too rich for the digestion of the infant, and is creating disorder of its stomach and bowels, it is of importance to give diluents freely, as barley water, or thin gruel, prepared from groats; the latter of which is particularly beneficial, especially in the earlier days of suckling. It is of great consequence, also, to attend to the state of the breasts in all instances of faulty secretion. In cases of too great richness of the milk, it has been observed by M. Péligot, that allowing it to remain longer than usual in the breasts, tends to an increase of its serous or watery part, and therefore the child should not be applied in such cases very frequently. Regarding the general management of the breasts, I have already, in the foregoing pages, thrown out a good many hints, more especially as to the prevention and treatment of engorgements. In the case of weakly and unproductive nurses, a great deal may be done to improve the quantity and quality of the milk, by due attention to the regularity and the frequency with which the breasts are given, and the amount of supplementary supplies which may be necessary for the infant at different stages during lactation. Although many interesting topics connected with the above subjects, and the influence of exercise, mode of life, &c. on successful lactation, yet remain for discussion, these must be set aside for the present, as I have already exceeded the limits permitted me.—*Month. Jour. Med. Sci.*

Inflammation and Abscess of the Uterine Appendages. By Dr. Bennet.—The almost universal view of the profession, that this disease is all but characteristic of the puerperal state, and very rarely occurs under other circumstances, our author considers as very far, indeed, from the truth. The disease is not at all rare in the non-puerperal state, and is often confounded with acute or chronic metritis, iliac abscess, or some other pelvic lesion. In the puerperal form of this affection, and owing probably to the increased quantity of fibrin contained in the blood, there is a greater tendency to active inflammation. Hence, if the structures contained in the lateral ligaments are attacked with inflammation, it has a tendency to spread to the peritoneal folds and the surrounding tissues, giving rise to the formation of large pelvic inflammatory tumors, abdominal adhesions, intestinal perforations, &c. often ending in death. In the non-puerperal inflammations the purulent collections are more limited; the inflammation seldom attacks the peritoneum, and the abscess generally disappears in a latent manner, bursting into the rectum or vagina.

The most frequent seat of this inflammation is the cellular tissue which separates the peritoneal folds and surrounds the ovaries, round ligaments, and Fallopian tubes. It may be produced by any cause which exaggerates the vitality of the uterine system. It may occur in connexion with ulcerative diseases of the cervix, or from a severe fall.

The swelling to which it gives rise may often be felt above the pubes, but an accurate diagnosis can be made only by a vaginal examination. The whole may disappear by resolution, but more generally it ends by suppuration, and the discharge of pus by the rectum, vagina, bladder, or through the abdominal parieties.

The treatment in the acute stage is the same as in ordinary phlegmonous inflammation, only it requires to be more active.—Bleeding, leeches, cathartics, and mercurials are the chief means to be resorted to. Dr. Bennet places most reliance on the repeated application of leeches to the abdominal parietes, immediately over the seat of the inflammation. In the chronic stage, when the parts are not so tender as at first, the application of leeches internally is very useful.—*Brit. Obst. Rec.*

MISCELLANEA.

Phellandrium Aquaticum in Phthisis and Chronic Bronchitis.—By M. Sandras.—In our number for July we quoted M. Michea's testimony in favour of this substance; and since then M. Sandras has published the results of a careful investigation into its merits, conducted during eight years at the Beaujon. He speaks of it in the highest terms of praise as a palliative of the most distressing symptoms of phthisis; and believes that occasionally it even exerts a curative agency, and at all events indefinitely postpones the progress of cases which furnish all the symptoms of incipient tubercle. He is, however, fully aware how deceptive these symptoms often are, and speaks with due caution on this point. The important agency of the seeds, however, in relieving suffering in undoubted and advanced cases of the disease seems certain; the days of the sufferer not only being considerably prolonged, but his path to the grave most materially smoothened. The good effects generally manifest themselves in from a week to a fortnight, by a diminution of fever and diarrhœa, a return of appetite and sleep, less dyspnœa, and an easier cough, so that the patient often supposes himself nearly well. The strength is supported in this way for a considerably longer period than it otherwise would be; and when at last it finally gives way, the course of the disease then becomes very rapid. *Chronic bronchitis* is obviously and speedily modified advantageously by this medicine. It is especially indicated in that form, which comes on in aged persons in cold damp weather, and persists until this changes; and in young lymphatic subjects, deficient in reactive power, it cuts short the tedious cough left by colds. M. Sandras has found it of no avail in emphysema and nervous asthma, except inasmuch as these were connected with chronic bronchitis.—*L'Union Médicale.*

Does Calomel exert any Specific Influence on the Billiary Secretion.—By MICHEA.—M. Michea, after detailing the various opinions which have been advanced as to the nature of the green stools which so often ensue on the administration of calomel, states the results of his own examination of fecal matters under varying circumstances. He observes, that in the dejections of healthy persons, the greater proportion of the elements of the bile exist only in a state of combination, and require alchohol and potassa for their detection. Free bile, i. e. bile soluble in water, is, according to Berzelius, found only in the proportion of 7-8 per cent. of fecal matters. For the detection of free bile M. Michea prefers nitric acid to Pettenkofer's test. In six persons, in good health, the acid furnished no traces of bile; and of three others suffering from gastro-intestinal affections, in one only who had bilious vomiting and green purging, was a notable proportion indicated. Of eight cases in which calomel was administered, in some in large, in others in small doses for successive days, in four only were green stools produced. This shows that the action of the calomel on the bowels is very uncertain, and tends to confirm the truth of Mialhe's doctrines, that it is dependent upon the conversion of the chloride into deuto-chloride; most of the persons in whom it produced no action, having been women, whose humors contain less of the chlorides than do those of men. Not only are the stools changed in color, but they are so in consistency, possessing neither the solidity of the natural stool, nor the aqueousness of those of dysentery or typhoid fever, but assuming an intermediate viscous character. In two of these cases the acid plainly evinced the existence of bile; and not only of biliverdine, but of the albumen of that fluid. In the other two cases albumen was also precipitated, giving however a color more analogous to the biliverdine of Mulder. In stools produced by various other purgatives, in five individuals no traces of the bile were produced, nor did they assume the consistency of those induced by calomel. The general result of the investigation is, then, to confirm the opinion of those who maintain the agency of calomel on the biliary secretion.—*L'Union Médicale.*

On Vinum Sem Colchici Opiate in Gonorrhœa.—By DR. FROINUS. —Dr. Eisenmann, in a communication to the 'Wochenschrift' in 1847, demonstrated the great utility of the *Vin. sem. colch.* (V. s. c. ʒ iij ; Tr. opii, ℈ ½), in doses of from 25 to 30 drops three or four times a day, in the treatment of both male and female gonorrhœa. Without denying that it may be sometimes desirable to precede its use by purgatives or oleaginous fluids, he had himself found it applicable in all stages of the disease, effecting a cure, upon an average, in about seven days. In the present paper, 10 additional cases are related of its successful employment in various stages of the affection; and reference made to some 50 others, in which it proved as satisfactory in the results. It is not only useful in infectious gonorrhœa, but in discharges from the mucus membranes from other causes.—*Casper's Wochen.*

Belladonna in Eneuresis.—By M. TROUSSEAU.—M. Trousseau takes the occasion of an obstinate case of eneuresis, occurring in a child 5 years of age, yielding to belladonna, to make known the modes in which M. Bretonneau has long employed it in this affection with great success. He prefers the powder of the root, and, to secure its proper preparation and preservation, he grows it in his own garden at Tours; but M. Trousseau has seldom found this in good condition in the chemists' shops, while the powder of the leaf may easily be so obtained. This is made into pills, each containing 1 *centigramme* (about 1-7 grain), and one of these is given every night. If the incontinence diminishes, the dose is not increased; but otherwise it is doubled or tripled. After taking the medicine for a week, it is suspended for a few days, then resumed for a week, and suspended for a week. Resumed again for a week, it is next suspended for two; and after another week's employment, is suspended for a month, and so on for a twelve month. Unless this persistence be observed, the cure of a disease so liable to relapse will not prove permanent.—*L' Union Médicale.*

Subsistence of Cholera in London.—During the past week, there were only *ten* fatal cases of Cholera in the metropolis and its environs. The daily official reports of the cases and deaths from this disease, throughout Great Britain, are no longer given, as the disease appears to have declined; and there is no longer any public apprehension on the subject. As in 1832, we may, however, have another outbreak in the summer; and to provide against this, the Privy Council order of the 28th of September, 1848, for the prevention of epidemic disease, under authority of the Act of last session, has been renewed for six months.

The order of the General Board of Health, dated the 15th of January last, and applicable to the Parochial Board of Glasgow, has been revoked in consequence of cholera having entirely subsided there.—*London Med. Gaz.* for *March* 30*th.*

Increase of the Cholera in Paris.—We regret to state that the latest accounts from Paris, dated the 26th inst. represent the cholera as making alarming progress, especially among the patients in the public hospitals. In London the hospitals have been almost entirely free from the disease.

At the Salpetrière, in Paris, there were in one day among the inmates, who are chiefly aged persons, no fewer than *fifty* cases.

There have been altogether in Paris since the 9th inst. 385 cases, and 180 deaths—a mortality of nearly fifty per cent. Of the 385 cases, 203 were among hospital patients, and the remainder were received from without. There are at present but few convalescents.—*Ibid.*

Items of Intelligence Relating to the Insane.—There are but two establishments in Spain especially for their use: one at Toledo, the other at Saragossa. The former accommodates from four to five hundred patients. A new Royal Asylum for the insane is now building at Madrid, and a second is to be established in Andalusia, and a third in the north of Spain.

The Government of Russia is about to erect an Asylum for the insane, in each of the following places:—Moscow, Kazane, Kharkov, Kiev, Odessa, Wilna, and Riga. At present, there is, we believe, but one in Russia, and that is at St. Petersburg.

The fiftieth Anniversary of the professional career of Dr. Jacobi, Physician of the Asylum of the Insane, at Sieburg on the Rhine, was celebrated with great pomp at that place on the 21st of March, 1848.

PART FOURTH.

EDITORIAL

AND

AMERICAN MEDICAL RETROSPECT.

A WORD TO OUR READERS.—With this number the twelfth volume (the second of the new series) of this Journal closes; and it may not be amiss for us to state, in a few words, its prospects for, and course during the coming year. Before doing so, however, we feel it to be an act of duty, as well as justice, on the present occasion, for us to tender those gentlemen who have, for the year past kindly assisted us in our onerous duties, our most sincere thanks. At and since the time when we first reluctantly undertook the exclusive editorial management of this Journal, until recently, peculiar obstacles tended to obstruct its progress, and yet, notwithstanding these, we are pleased to announce, that the contributions and support of the profession have steadily increased, so much so has this been the case, that on the present propitious occasion our collaborators and subscription list will, we hesitate not to say, favorably compare with that of any similar American publication. With the next number we commence the thirteenth volume under new and increased auspices. And, as we have every reason to believe, with the support (and if we may be allowed to humbly add) confidence of the profession. We have the assurance on the part of the publisher and proprietor that nothing shall be wanting to make it all that it should be, a timely and desirable journal, one that in its typographical execution and general appearance shall not be excelled in this or any other country. With this intention in view, the type and general dress of this number has been changed—a change which will, we doubt not, prove acceptable to all. With us, not excluding the profession of this city, lays the far more important duty of rendering its pages valuable. The abundance of material which our city contains, and the facility with which it may be made to serve the honor and interest of the profession at large, is proverbial. We have more resources to draw upon than any other city in the western world; and, if we mistake not, nothing is now wanting but the true *esprit du corps* on the part of the profession to make New-York, through her various medical institutions and societies, the great emporium of medicine in this country, as it is now that of commerce. It is plain to be seen that there is at present a growing tendency towards such a spirit—ours shall be the duty to foster and encourage it. In regard to the course of the Journal, our readers may feel assured that it will continue not only nominally but actually independent—firm in the right cause, it will eschew all favoritism—responsible only to *the* profession for the purity of our intentions and acts, we shall strive to merit that confidence and support which a liberal profession is in duty bound to give for its own welfare and prosperity. We solicit carefully prepared contributions, well analysed cases, &c. &c. for our pages, and especially direct the attention of all to the prospectus on the cover of this number, requesting that contributions intended for the Journal, may be sent in, as early as the first of the month prior to the one on which our numbers appear.

BELLEVUE HOSPITAL.—We have received with great pleasure the *Annual Report of the Bellevue Hospital for* 1848, by D. M. REESE, M. D. L.L. D. We now take occasion to refer to this Institution, and to signalize the many and important improvements, for which the profession and the public are indebted to the energy of the present Resident. In the Report for 1848, which, although dated 31st December, is just published, we have a resumé of these improvements, and an account of their practical results, in diminishing the rate of mortality, &c. To put our readers in possession of these results, we shall make a few extracts from the report—first, as to the large number of cases treated:

The whole number of patients remaining under treatment at the beginning of the year 1848, was 535; since that period there have been admitted 3797, making a total of 4332 patients received into this Hospital within the year just closed; showing an average admission of over ten new cases for every day in the year.

Of these patients, the mortality is little over 14 per cent. Showing a very flattering comparative success. But it is well remarked in the Report, that

To make such estimate with accuracy, however, which truth demands, the proportion of our patients perishing by tuberculous consumption, and other organic diseases which are known to be incurable and who are sent hither only to die, should be fairly stated. Very many of the hundreds to whom this remark applies, have been previously treated by the medical officers of other hospitals, dispensaries, &c. and dismissed for the reason that they were incurable; and for the same reason they have been sent here. A large number of these patients, moreover, are only brought to this Hospital a few hours before death, very often dying on the night of their admission, and under circumstances which preclude all treatment.

But the most flattering tribute to the importance of the changes suggested by Dr. Reese, and the excellent management of the Institution under his care, is given by the table of mortality extending back twenty years—by this it appears that the per centage of mortality has been reduced, from over twenty, to less than fourteen per cent.

The changes which have produced this remarkable result are—

1st. A complete separation of the Hospital from the Alms House.

2d. Improvement in the new Hospital building.

3rd. The sick poor are sent directly to the Hospital, not as heretofore, to the Superintendant of the Alms House.

4th. The substitution of respectable honest nurses, for the male and female convicts, hitherto employed, to attend the sick.

5th. Dismissal of female penitentiary laborers, and the employment of female paupers in their stead; thus breaking up all connexion with, or dependence on, the Penitentiary; a vicious and mischievous connexion which ought never to have existed. After suggesting several changes, which we hope will be made at the earliest period, Dr. Reese pays high and deserved compliments to the Visiting and assisting Physicians; and records, with expressions of deep feeling, the death of three of his assistants, who have died in their duty during the past year. The report is followed by several interesting tables: from one, that of the diseases of those who died during 1848, we glean the following facts, as illustrating the character of the patients, and the hopelessness of their cases. Total mortality being 625: there died of Syphilitic Cachexia 9; Delirium Tremens 25; Phthisis 166; Exhaustion 8.

This Report, and the facts set forth in it, are very creditable to Dr. Reese, and abundantly justify the earnestness and zeal with which he has contended against *evil influences*, for the changes to which the improved condition of the Hospital is justly attributed.

MEDICAL DEPARTMENT, UNITED STATES ARMY.—With much pleasure we give place to the following circular from the Surgeon general, Dr. Lawson. The untiring zeal and perseverance manifested by the heads of this department, have, in a measure, resulted in success. We feel confident that the honorable exertions which have lead to these results will be duly appreciated by all interested.

We trust, that ere long, our gallant and meritorious brethren in the navy will soon meet with common justice. It is hardly necessary for us to add, that the instructions given in the circular merit the closest possible attention.

Circular. Surgeon-General's Office, February 7, 1849. Sir: The position to which the Medical Staff of the Army has attained after long struggle against prejudice and error, and in opposition to views entertained by some high in authority, is a gratifying illustration that "truth is powerful, and will ultimately prevail."

The Officers of the Medical Department may now rest satisfied that their position in the army cannot be successfully assailed by arguments addressed to the reason; and that if driven from the ground they now occupy, it can only be through the temporary triumph of prejudice and authority over truth, reason, and justice. Conscious of the soundness of their claims to military rank, the members of the Corps will hold themselves prepared to meet any issues that may arise between themselves and others in authority; and appealing to law and regulation, resolve "to ask for nothing but what is right, to submit to nothing that is wrong."

While it is confidently anticipated that the senior officers of the Department will be governed by a sound discretion, and always pursue the course best calculated to secure their rights, it is deemed expedient to call the attention of its junior members to some considerations which may aid their inexperience and lead them to a correct appreciation of their military position.

On the day of his appointment, an Assistant Surgeon is invested by law* with the rank of First Lieutenant. This rank will give him precedence (except where military command is implied) of all Second Lieutenants, and of all First Lieutenants whose appointments as such date subsequent to his own commission.

On all details, then, for Courts Martial, Military Boards, and other mixed commissions where military command is not involved—each member acting independently, and giving his vote free from military control—the rank of the Medical officer will take effect; and against any order convening such Boards, &c. which embraces him in the detail without a recognition of his military position, it is his duty firmly yet respectfully to protest.

It is enjoined upon all Medical officers to take, in a conciliatory spirit, a decided stand upon this point at the very outset; and for the reason that encroachment promptly met will be more promptly checked; while any evidence of irresolution, or want of confidence in the correctness of their position, might lead to further aggression.

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* "And that the rank of the officers of the Medical Department of the Army shall be arranged upon the same basis which at present determines the amount of their pay and emoluments: *Provided*, That the Medical officers shall not, in virtue of such rank, be entitled to command in the line or other staff departments of the Army."—*Laws of the U. S. passed at 2d Sess. 29th Congress, Chap. 8, and part of Sec. 8, of an act to raise, for a limited time, an additional military force, and for other purposes.* Approved February 11, 1847.

The time is propitious for the acknowledgment of the claims of the Medical Staff to a specific military position. During the late war with Mexico, their conduct in the field was the subject of high commendation; and there is a current of feeling in their favor, which, if not diverted from its course by acts of indiscretion on the part of the officers themselves, will go far to remove the prejudices which have hitherto opposed the recognition of their rights.

Hereafter, but few military men will be disposed to regard the Medical Department as a subordinate branch of the Military Establishment, and less entitled to consideration than other staff departments of the Army. There are some, it is true, who will never be able to escape from the thraldom of opinions formed in early life; but the great body of well informed military men will, it is believed, ultimately acknowledge the correctness of the views herein set forth. Let the officers of the corps, therefore, studiously avoid every thing which might exasperate feelings, and give stimulus to opposition.

Recollecting that the same law which gives officers of the Medical Staff military rank, excludes them from the right of command in the line or other staff departments of the Army, let them be careful to abstain from any assumption of authority in which they cannot be sustained by the regulations of the Army or the laws of the land.

Protected as they now are from all degrading disabilities, and independent in their own sphere of action, let them, by a faithful devotion to their official duties, and a rigid observance of their high moral obligations to the community in which they move, illustrate the merits of the corps.

By such a course of conduct steadily pursued, opposition will be disarmed, and the Medical Staff will continne to advance in the respect and the confidence of the whole army. I am, Sir, very respectfully. Your obedient servant,

Th. Lawson, *Surgeon-General.*

In further illustration of the views set forth in the foregoing Circular from the Surgeon-General's Office, the following order from the Head Quarters of the 1st and 3d Military Departments is hereto appended:

Head Quarters, 1st and 3d Military Departments,
Troy, N. Y. January 24th, 1849.

CIRCULAR.

The following opinion of the Major-General commanding the Eastern Division, concurred in by the Secretary of War, is published for the information and guidance of all concerned:

"With reference to Act February 11th, 1847, Section 8, it is my opinion that the detail of Lieutenant Winder, over Assistant Surgeon Henderson, was wrongfully made—that Act having evidently changed the principle of paragraph No. 5 of the Regulations of 1841, which prohibited Staff officers, without army rank, being detailed as Presidents of mixed Boards, or Councils."

In accordance with the views set forth in the above opinion, medical officers detailed upon Boards and Councils, will take precedence according to the rank assigned them by the law above referred to. By command of Major-General Wool,

(Signed) O. F. Winship, A. A. G.

New-York State Medical Society.—At the recent meeting of this Society the following resolutions were unanimously passed:

Resolved, That the sentiment uttered by General Zachary Taylor, at the battle of Buena Vista, that "He would not leave his sick and wounded behind him," is eminently humane, and merits a record and memorial in the Archives of the Medical profession.

Resolved, That it is hereby recorded and commemorated.

Resolved, That a copy of these resolutions, signed by the President and Secretary, be transmitted to General Taylor.

Prize Essay. The New-York State Medical Society, at their recent meeting, passed the following resolutions:

Resolved, That a prize of twenty dollars be offered by this society for a tract of not less than four, or more than sixteen pages, which shall most clearly expose the pernicious influence of nostrums or secret remedies, upon the health and morals of the community.

Resolved, That the Committee on Prize Essays award the above prize, and publish the accepted communications.

The Chairman of the Prize Committee is Dr. James McNaughton, of Albany.

New Orleans Medical and Surgical Journal.—A few months since, we noticed the retirement of Drs. Carpenter and Fenner from the editorial management of this Journal. Soon after which, it became our duty to record the early death of Dr. Carpenter. By the March number of this Journal, we learn that Dr. Harrison has also retired, leaving Dr. Hester alone in his editorial labors. And now it becomes our painful duty to announce the death of the former. The Examiner, in speaking of the death of Dr. Harrison, very truly says: "His loss will be severely felt by the University of Louisiana, in which he held the Professorship of Physiology and Pathology." To which we may add, by the whole profession. We shall, if possible, in our next number, give our readers an obituary notice of Dr. Harrison.

Statistics of Medical Colleges.

With no small degree of pains we have collected, as far as possible at present, the statistics of the following Medical Schools.

		Students.	Graduates.
1.	College of Physicians and Surgeons of N. York,	176	39
2.	University of the City of New-York,	411	147
3.	Jefferson Medical College,	497	188
4.	University of Pennsylvania,	499	190
5.	Medical College of Ohio,	175	50
6.	Rush Medical College,	100	18
7.	Massachusetts Medical College,	126	25
8.	Medical College of Georgia,	133	36
9.	Albany Medical College,	101	
10.	Philadelphia College of Medicine,	91	21
11.	University of Maryland,	190	64
12.	Medical Department of Transylvania University,	120	46
13.	“ “ University of Louisville,	331	81
14.	“ “ “ St. Louis,	154	
15.	Starling Medical College,	173	50
16.	Medical Department of Pennsylvania College,		36
17.	University of Missouri, St. Louis,	154	38

PATHOLOGY AND PRACTICAL MEDICINE.

Laryngitis Membranacea, *treated by Ammonia and Oil.*—By F. L. Ogier, M. D.—I think the throwing off of the false membrane in this case may be attributed to the stimulating effect of the ammonia on the mucous membrane, and not on the mechanical efforts of vomiting. Other emetics, as zinc, tartar and ipecac, failing to produce the effect, though carried even to exhaustion. The ammonia is inhaled at the time the medicine is given, and then again when the patient vomits some of the vapor gets into the trachea, and it is in this way that Ammonia appears to act. Doubtless when the membrane is then loosened by the new action, excited by the hartshorn, the effort of vomiting assists in detaching it from the surface. In many cases of diphtherite, death does not take place until the false membrane extends throughout the trachea and bronchii, and even to the small ramifications of the bronchial tubes. Post mortem examinations always exhibit the smaller bronchial ramifications completely choked with this false membrane. As far as my observations have enabled me to form an opinion, the disease always commences in the fauces and larynx, and extends gradually down the windpipe, and it is not until after the patient has been ill for some time that we find the bronchii and lungs affected. In some cases the patient dies from suffocation before the disease has had time to extend half way down the trachea, and when there is much swelling about the throat, and the false membrane is formed rapidly and thick, the larynx is completely closed by it, and the patient suffocates, while the trachea and bronchial tubes are perfectly healthy. It is of great consequence, therefore, to apply our remedies, whatever they may be, early; for if the patient avoids suffocation in the first stage of the disease, the membrane extends gradually down into the lungs, and will soon be beyond our reach.—*Char. Med. Jour.*

DEATH FROM CHLOROFORM. By J. JEFFREYS, M. D.—March 7, 1849, I was called at about 7 o'clock, A. M. to visit Abby Pennock, said to be 17 years of age, a domestic in a family of high respectability, residing in Mount Vernon-street. I found her dead under the following circumstances. The body was lying on a feather bed, on the left side, with the head bent forwards to the edge of the pillow; the arms crossed; the right hand, containing a linen handkerchief crushed into a small compass, was pressed with such force upon the upper lip and nose as to produce considerable distortion. The left forearm crossed the right, as if to aid the pressure upon the mouth; the knees were drawn high up in the bed; the eyes were open, and the pupils dilated; her night cap was tied very tightly under the chin; the bed-clothes were drawn over the head; the face, especially at the lower part, the throat, chest and arms, were quite livid; the body was warm, and exceedingly rigid, so much so, that in forcing the hand from the mouth the whole body was turned over; the handkerchief which she held had a faint smell of chloroform. From the impression on the soft bed it appeared that she had not moved from the position assumed on first laying down. No phial containing chloroform or any drug could be found about the room; but there was lying on the table a piece of paper having the appearance of having been recently used as an envelope for a phial. .Having determined to make a more full examination of the body in the afternoon, it was left nearly as found.

At 4 o'clock, P. M. the autopsy was made, being conducted by Dr. J. B. S. Jackson, with the following results. The lividity and rigidity had decreased since the morning. A little bloody froth was noticed at the mouth. On removing the body from the bed, a two-ounce phial was found under the body, containing chloroform, from which (as was subsequently ascertained) three drachms of the fluid had been taken. This circumstance, in connection with the other appearances, showed the cause of death to have been the influence of chloroform. It remained therefore, to investigate what were the effects upon the various parts of the body.

The muscles appeared to be in a healthy condition. The left lung was livid and much congested throughout, but most so on the dependant part. The lower lobe and the posterior portion of the upper, upon the right side, presented the same dark purple color as the left, but the middle lobe and anterior portion of the upper was a bright scarlet color externally and throughout their substance. This last portion was not congested. The bronchi contained some frothy fluid. At the rima glottidis there was a thickening on each side, with an excoriated surface for about three or four lines. Something of the same kind was noticed in the fauces near to the glottis. The thymus gland was large, its cavity containing a puriform fluid as usual in children. The heart appeared to be unusually, empty and was flaccid—the ventricles having lost their convexity, and having fallen into a somewhat concave form. The heart contained a little blood. The blood was everywhere perfectly liquid, with the exception of one very small coagulum in the right side.

The stomach, which contained about ten or twelve ounces, mostly of fluid, with some solid contents in a state of partial digestion, appeared healthy, except two small patches of congested vessels near the lesser curvature. There was no odor nor appearance to indicate the presence of any drug in the stomach. The small intestines at the upper part, were healthy, having their lacteals crowded with chyle. At the lower part the small intestines were in a state of decomposition, being brown or green in parts, and most offensively fœtid. Nothing attracted attention in the large intestines, which were somewhat offensive, except a deviation in anatomical structure, of occasional occurrence, in that the caput coli was less bound by several inches to the right ileum than is usually the case. The spleen was larger than common, perhaps slightly congested, and a little darker than usual. When incised it appeared somewhat granular. The liver was healthy, and the gall-bladder nearly empty. The kidneys were healthy—that of the left side, being the lower one, was a shade darker than the right. Bladder healthy.

The brain and its membranes were perfectly normal. There was no congestion of vessels, no change of color or consistence of the substance of the organ.

Some appearances of other organs, which could not arise from the influence of chloroform, are purposely omitted.

It was afterwards ascertained that this person was in the habit of inhaling ether or chloroform for the purpose of producing intoxication; that she had done so on the evening of the 6th, and that she procured that which was found in her bed, on the same evening. She had eaten supper about 6 o'clock, and retired about 9 o'clock. At half past 9 she was noticed to be in the same position as found in the morning, and did not answer a question put to her by another female occupying the same room, and was supposed to be asleep.

From this narrative it appears to be conclusive that she died from the use of chloroform, the particular effects of which were seen in the congestion of the lungs, and the peculiar oxygenation in a part of them—in the emptiness of the heart, and in the fluidity of the blood. And it is a point of interest that the brain was so free from congestion or other abnormal appearances, especially when considering the stricture made about the throat by the string of her cap. The quantity used was less than is used by surgeons and physicians in daily practice. Hence it would appear that the inhalation of chloroform is more dangerous than it is supposed to be by many.—*Boston Med. and Surg. Jour.* for *March* 28.

SURGERY.

Enlarged Thyroid Gland.—*Death from Suffocation.* By Prof. F. H. Hamilton. (*Trans. of N. Y. State Med. Soc.*) At the recent meeting of the State Society Prof. Hamilton mentioned the particulars of the case of a clergyman who had suffered for more than twenty years from occasional paroxysms of difficult breathing, supposed to be asthma; these symptoms gradually increased, accompanied with a steady enlargement of the thyroid gland. For several months preceding his death, his sufferings were extreme and unremitting. A few weeks previous to his death a sudden discharge of a small quantity of grumous blood took place from the trachea, followed by temporary relief. A few days previous to death the trachea was found pressed forcibly to the left, being displaced at least an inch. An unsuccessful attempt was made to relieve the difficulty of respiration by dividing all the textures lying in front of the enlarged gland. That portion of the tumor lying in front of the trachea was now dissected up and divided, but a like result followed—the elevation of it by the tenaculum afforded no relief. It now being apparent that the trachea was permanently narrowed by long continued pressure, the operation of tracheotomy was performed by Prof. Hamilton, by means of which the patient breathed quietly and freely until his death. The autopsy disclosed the right thyroid lobe enlarged to about five inches in its transverse diameter; containing several imperfectly formed cysts filled with grumous matter. One of these cysts, with a portion of hypertrophied structure, was situated directly behind the trachea, occupying all the space between the cricoid cartilage and the sixth and seventh cartilaginous rings, encroaching upon the tube from this direction so as to effect an almost complete closure; leaving an opening scarce two lines in diameter.

[Was not this one of those cases where the *isthmus* of the gland passes behind the trachea, instead of in front, as is generally the case? The degeneration and enlargement of the gland had no points peculiar in itself; at least, it does not so appear from the description given.—*Ed. N. Y. Jour. Med.*]

Observations on Psoas Abscess. By F. Hyde, M. D.—The earliest *symptoms* of the affection were rarely observed, since the patients seldom presented themselves for professional advice until such severe structural charges had taken place, as to render a diagnosis of little value as a basis for successful treatment. There was, however, a marked want of identity in the earlier symptoms that were observed, so much as to embarrass the arrival at correct conclusions, even so late as the external pointing of the abscess. Post mortem examinations, however, showed an identity of pathological condition, both of the original structures involved, and the results of the diseased processes. As to the etiology of the disease, the writer was fully of the opinion that, in the instances cited, at least, it originated in a concurrence of accidental causes, rather than from any predisposition to it, identical with the physical organization; believing, however, that similar causes would more readily excite the disease in one of a strumous habit, than in one possessing an originally sound condition.—*Pathology.* Of the thirty cases observed, nine were examined post mortem. In only one instance did he find disease of the spinal column. The result of these examinations forced upon him the conviction that the structures originally affected by the morbid process were, either the psoas muscle, or its immediate envelopes; and that cases which show an alteration of vertebral structure, are instances of tissues involved by the extension of the rigieul disease. The *prognosis* is decidedly unfavorable. The writer had never witnessed a single recovery in a well marked case of the disease. Several cases gave strong promise of ultimate recovery, but eventually the disease returned with exasperated symptoms, and terminated fatally. It was suggested that the *diagnosis* of the disease in its earlier stages might be made by observation of the deranged function of the psoas muscle, in reference both to the movements of the body and extremity, the position of the limb in relation to the body, both in the erect and recumbent postures, and by attentive consideration of the pain when compared with that of real lumbago. The *treatment* that gives any promise of success, must be applied in the earliest inflammatory stage. When pointing took place, the writer recommended the evacuation of the abscess after the method of Prof. Miller, of Edinburgh. *Trans. of Med. Asso. of South. Cent. N. Y.*

FRACTURE TABLES.—By Prof. HAMILTON.—(*Buffalo Med. Jour.*)—The following summary of 136 cases embracing almost every variety of fractures, is of so much interest, both in a practical as well as statistical point of view, that we copy it entire.

Ossa Nasi, three cases; of which none are perfect; there being more or less deformity in each case.

Vomer, one case, with lateral displacement.

Inferior Maxilla, whole number five; all in adults; all compound comminuted; all have united. Three are perfect and two imperfect.

Clavicle, total eighteen. Perfect six; imperfect twelve. Two of the six perfect cases are children under eight years. Fifteen occurred near the junction of the outer third with the inner two-thirds; three near the middle. Four were comminuted; fourteen simple. I believe not more than three or four were transverse. All have united. Eight shortened from a quarter of an inch to an inch.

Acromion Process, one case; united by ligament, but use of arm perfect.

Humerus, fourteen. Twelve simple; two compound comminuted; thirteen united, one not united; three shortened from half to three-quarters of an inch. Five perfect; nine imperfect.

Radius, eight. All simple. Five perfect; three imperfect.

Ulna, nine. Seven simple; two compound. Eight perfect; one imperfect.

Radius and Ulna, thirteen. Eleven simple, one compound, and one comminuted. Two not united. Seven perfect; six imperfect.

Ribs, four. All simple. Two perfect; two imperfect.

Posterior Superior Spinous Process of Ileum, one case, and this left the fragment projecting.

Femur, Twenty-eight. Seven through the neck; whether within or without the capsule I have not determined but in one instance. The signs are generally too obscure to make a positive diagnosis. Twenty-six simple; two comminuted. Of twenty broken through the shaft, fourteen are shortened from half an inch to two inches. Only two fractures of the shaft of the femur, out of fifteen cases occurring in adults, are perfect. Probably all the fractures through the neck are shortened, but they were not all measured since recovery.

Patella, three. All united by ligament.

Fibula, four. Two perfect; two imperfect.

Tibia, two. One perfect; one imperfect.

Tibia and Fibula, Twenty two. Seven simple; fifteen compound, or comminuted. Nineteen united: three not united. Twelve shortned from quarter of an inch to an inch and a half. perfect; seventeen imperfect.

MIDWIFERY.

USE OF ANÆSTHETICS IN MIDWIFERY.—By Prof. LINDSAY.—The following directions, relating to the use of Anæsthetics in Midwifery, we copy from the Transactions of the American Medical Association:

1st. That the pain attendant upon parturition, which is frequently so agonizing to the delicate organization of woman, and occasionally even fatal from its severity, may be partially or wholly relieved.

2d. That even in very small quantities, they benumb the acuteness of sensibility and thus allay that feeling of fear and apprehension, which is often so distressing and injurious to the parturient female.

3d. That this tranquillizing impression may be kept up for hours with entire safety, and will be found of the greatest benefit in those tedious and harassing labors, where the condition of the parts is such as to admit of no other active interference; and our patients may thus be enabled to pass successfully the trying ordeal, when without this relief, they would succumb under their long continued suffering.

4th. That relaxation of the soft parts and of the os tincæ, and increased secretion of mucus follow their use, and that these circumstances are in themselves of much importance in advancing the labor.

5th. It is the opinion of many accoucheurs, and of some of the committee, that they increase the expulsive efforts of the uterus and decidedly aid in the expulsion of the placenta, thus manifesting the qualities of the ergot, in addition to their other peculiar properties. Should farther experience demonstrate the truth of this proposition, it will be a matter of considerable moment, as these remedies, particularly chloroform, can be administhred much more readily than ergot, and will produce their effects much more speedily.

MANAGEMENT OF THE PLACENTA.—By Prof. FLINT.—(*Buffalo Med. Jour.*)—Directly after the fœtus is expelled, or delivered, and the funis severed, we grasp with one or both hands, the uterus above the pubis, and excite its contraction by manipulation with the fingers, through the abdominal walls, varying the degree of pressure with the tenderness over the abdomen, never, of course, using force enough to occasion much, if any pain. The uterus will be readily felt contracting under the fingers, until, at length, it becomes firmly contracted. We then intermit our manipulations, and if convenient, it is well for an assistant to make firm pressure over the lower part of the abdomen. Next, seizing the funis, we endeavor to follow up with the finger to its attachment to the placenta. Often this will be easy, the placenta being entirely detached, and lying in the os uteri, or in the vagina. We never make much, if any traction of the chord; but if the placenta be not readily felt, we proceed, with but little if any delay, gradually and carefully, to insinuate the fingers arranged conically, into the vagina. In this procedure we never give pain; if the patient complain in the least, we advance more slowly, or not at all. But in the vast majority of cases, the introduction of the fingers, and even the hand, (if it be not of a large size) is unattended by suffering. Generally, the fingers introduced will reach the placenta, or uterine contraction will be excited, which will bring the placenta within reach. If not, the hand is carried forward, provided no pain is occasioned. When the placenta is reached, we make careful efforts of extraction, hooking a finger over a portion of it, or plunging a finger into its structure. These efforts and the presence of the hand, scarcely ever fail to excite contraction, and generally the necessity for continued manual delivery is slight—the accoucher has only to withdraw his fingers, or hand, before the advancing placenta, giving a little assistance if required.

MISCELLANEA.

Medical Board of Examiners, U. S. Army—Among the acts by the last Congress, was one to increase the Medical Staff of the Army, and it is now officially announced that a Board of Medical Examiners, consisting of Surgeons Mower, Wood and Cuyler, and Assistant-Surgeon Thomas Henderson, will convene in New-York on the 1st of May for the examination of Assistant-Surgeons for promotion, and such applicants for appointment in the Medical Staff of the Army as may be invited to attend. The junior member acts as recorder. The sessions of the Board will be continued during a month, at least. Candidates being between the ages of 21 and 28 years should forward their applications to the Secretary of War, accompanied by respectable testimonials of moral character and physical qualifications. There are nine vacancies existing in the medical department in the grade of Assistant Surgeons.—*Med. Exam.*

OBITUARY.

Obituary Notice of P. S. Townsend, M. D.—Few men of our profession have passed away whose merits are as little known as Peter S. Townsend, M. D.

Dr. Townsend was a native of New-York, and received a liberal education in Columbia College.

He afterwards studied medicine with the late distinguished Dr. David Hosack, and graduated in Medicine in the flourishing days of the College of Physicians and Surgeons, when Mitchell, Post, Hosack, Mott, Francis and others were professors. Immediately after receiving his Degree he settled in New-York with the most flattering hopes, from distinguished family relatives and connections.

Having early imbibed from his preceptors his views of the contagion of Yellow Fever, he became, from his learning and talents, its ablest advocate and supporter in this country. This is fully sustained in his able work on fever.

Hemorrhage from the lungs, from time to time, followed by cough and confirmed hectic, induced him to seek in the Tropics a more genial climate.

He went to the Bahamas, where he resided several years, practising his profession with distinguished reputation. He never lost sight of his favorite subject Yellow Fever; and while residing in the West Indias took the opportunity of visiting Havanna during a fearful visitation, where he plunged himself in the midst of it, to learn it *in its own land*. This he not only did by seeing it in its different phases, but by *post-mortem* inspections.

From all this he emerged unscathed, and with the most settled conviction of the individuality and familiarity of Yellow Fever, that it was a disease *sui generis*, contagious, and only indigenous to the Tropics.

On his return to his native city he published his work on Yellow Fever, which is a sound practical work, the result of a personal and familiar acquaintance with the disease, and which has obtained for him the *commendation* of his countrymen and the laudations of foreign writers and practitioners.

Shortly after this he conceived the happy idea, that the condition of the sick and distressed mariners, the noble hearted tars of the ocean, might and ought to be improved; upon this, he presented a petition to the Legislature of the State, and obtained from that body, by his own personal application, a charter for the establishment of the *Sailor's Retreat,* at *Staten Island.*

Being the founder of this noble Asylum, he was at once elected Superintendant and Chief Medical officer, to organize and bring it into successful operation. This he fully and happily accomplished, and thousands of sick and distressed seamen have been, and will long continue to be, the grateful recipients of its comforts. Long, very long in the distant future, will the name of Townsend be lisped and recalled, as one of the greatest benefactors to those whose "home is on the deep."

As this Hospital was every thing to his genius and untiring exertions, here he ought to have lived, and here he ought to have died. But the ever changing face of politics doomed it to be otherwise, and he was superseded.

Feeling most keenly this bitterest of ingratitudes, he strangely, and most unfortunately for a time, embarked on the troubled sea of politics, instead of the tedious routine of private practice. At length, however, the zest for it faded away, and he gradually returned to the quiet walks of professional life.

Leisure was afforded him to review and revise his former writings. His work on Yellow Fever first claimed his attention, which he soon amplified and enlarged—after this he fitted up and completed for the press a most extensive work on *inter-tropical diseases.* This latter alone comprises, in manuscript, about eleven hundred pages. Besides these he has a variety of manuscripts on various subjects, and we venture to say the largest collection of recorded cases, with remarks, of any medical man in America.

All these are valuable treasues, and it is hoped will some day be brought before the profession.

At the suggestion of his much attached friend and relative Dr. Mott, he was induced to undertake the arduous task of making a translation of the great Surgical work of M. Velpeau. In this new dress it has become a Surgical treasure to the profession of this country.

From having resided for some time on the continent of Europe, and being familiar with several different languages, Dr. Townsend was enabled to bring this valuable work up to the present time, and with the assistance of Dr. M. it is believed the additional matter has greatly increased its value.

Before the completion of this laborious task, to which he devoted all his time, with the most untiring industry, his general health began to fail, and a cough which had been his companion for many years was now aggravated, attended with emaciation and hectic; a very general anasarca superadded, followed by deposit of water in the cavities of the pleura and pericardium, a few hours before his death. This calamitous event took place on the 26th day of March, 1849, at the age of 53 years.

This solemn event he viewed and spoke of with great composure, and indeed he wanted it. It was delightful to witness the tranquility with which he approached the awful change. His views of religion were those of Fox and Penn.

It was indifferent to him to what Church he went, for he said to me, there is *one church* and *one chapel, where we all must worship, the chapel* in our own bosoms—*one shrine* at which we all must kneel—the shrine of free and sincere piety in every man's own heart—and one *Holy Teacher*, with whom we must all commune, and from whom we must all obtain absolution; and that teacher, and that monitor, our own conscience.

There was a bright and cheering hope in the bosom of my friend, it was a full reliance upon the mercy of a God, and the rewards of a future state.

> "Sure the last end
> Of the good man is peace!
> How calm his exit."

The tribute of a friend. M.

DEATH OF SIDNEY B. WORTH.—Died on the 18th of March last, of Typhus Fever, Sidney B. Worth one of the assistant physicians of Bellevue Hospital, aged 30 years. He was a graduate of Columbia College, and about to receive his degrees as Doctor of Medicine from the College of Physicians and Surgeons of this city. The following resolutions have been forwarded us for publication.

[Want of room compells us to omit the obituary resolutions passed by the students of the class on the occasion of this young man's death.—*Ed. N. Y. Jour.*]

DEATH OF DR. JAMES SHEFFIELD.—Died at Earlville, N. Y. on the 23d March last, Dr. James Sheffield, aged 82 years. Dr. Sheffield for upwards of 45 years was an extensive and successful practitioner of medicine. In 1802 he became a resident of Chenango County, at that time almost a wilderness. It was at this period he was frequently compelled to ride professionally a distance of thirty, and sometimes forty miles. He was at a later period of his professional career, one of the most successful practitioners of obstetrics which the interior of the state furnished.

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